ADDIS ABABA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

DEPARTMENT OF MANAGEMENT

OFF-BALANCE SHEET COMMITEMENTS: DETERMINATION OF PRACTICE AND IMPACT ON PERFORMANCE

A THESIS SUBMITTED TO THE DEPARTMENT OF MANAGEMENT IN PARTIAL FULFILEMENT OF THE REQUIRMENTS IN EXECUTVE MASTERS OF BUSINESS ADMINISTRATION

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May 2020

Addis Ababa, Ethiopia

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DECLARATION

I hereby declare that this research study paper is my own work towards the EMBA and it does not contain any material previously published by another person nor material which has been accepted for the award of any other degree except where due acknowledgement has been made.

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I declare that I have supervised the student in undertaking the research reported herein and I confirm that the student has my permission to present it for assessment.

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Signature……..
Date……

ACKNOWLEGEMENT

First and for most, I would like to express my appreciations and thanks to the Almighty God for his divine province, love and care which has sustained me for all these years.

Then, I would like to take this opportunity to express my sincere thanks to all who made significant contributions towards the success of this work especially my advisor Dr. Asres, for his invaluable advice, contribution, time and documentary support which has made this piece of idea a success.

I am also highly indebted to all my friends who supported me in distributing and collecting the research questionnaire in this difficult CORONA Pandemic season and despite their numerous work schedules.

Finally, I am grateful to my family: father& mum who always encourage me to progress, my husband, daughter and son for understanding; and all who contributed in one way or the other in making this work a success, God richly bless you all.

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ACRONYMS

CAMEL:	*Capital adequacy, Asset Quality, Management, Earning and Liquidity*
CAR:	*Capital Adequacy Risk*
CBE	*Commercial Bank of Ethiopia*
KYC	*Know Your Customer*
LR:	*Liquidity Risk*
LIQr:	*Liquidity Ratio*
NBE:	*National Bank of Ethiopia*
NPL:	*Non Performing Loans*
NPLr:	*Non-Performing Loans Ratio*
OB:	*Off-Balance Sheet*
OBC:	*Off-Balance Sheet Commitments*
Rev:	*Revenue*
ROE:	*Return on Equity*
IT	*Information Technology*

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ABSTRACT

One of the striking developments in today's banking industry is the increasing tendency of banks engagement in off-balance sheet commitments (OBC). *Using off-balance sheet as a means to increase income/profit has been increasing from time to time. On the contrary, there are so many risks resulting from such commitments like credit risk, liquidity risk, market risks, operational risk, capital adequacy risk, etc. Thus, it is necessary to establish sound OBC management system in order to manage the various risks emerged from these items and ensure sustainability of the financial institutions.*

To obtain an in-depth understanding the overall OBC risk, the researcher employed both quantitative and qualitative data. Qualitative data was gathered from employees of eleven privates banks in the form of questionnaire while the quantitative data were obtained from the National Bank of Ethiopia for ten years period from 2010-2019. Both descriptive and analytical research methods were applied to assess the OBC management practice and the inherent risk of the product by investigating its relationship with risk and return. Mean as well as standard deviation measures were utilized to analyse the data and to make a broad argument to answer the particular research questions. Furthermore, the analysis considered correlation and regression analysis to test the study hypotheses. Statistical Package for Social Sciences (SPSS) was applied to analyse descriptive statistics, correlation and regression analyses.

As per the result, OBC is increasing at an increasing trend, and OBC had significant negative impact on the bank's liquidity and capital adequacy risk, while it had significant and positive relationship with revenue but negative insignificant relationship with credit risk and ROE. The study also revealed OBC management practice of the private banking industry including the role of NBE was found unsatisfactory and not commensurate with the inherent risk that the product bears and its level of exposure.

Key Words: *off-balance sheet Commitments, Off-balance sheet management; risk, return, Ethiopian private commercial banks.*

CHAPTER ONE

1. INTRODUCTION

1.1 Background of the Study

Off-balance sheet commitments are transactions take on by organizations to generate income. Hassan M., Karels G. and Peterson M. (1994) defined off-balance sheet activities as the banking products and services that are not reflected in the balance sheet portfolio. These activities generate fee income; however, any deterioration in this portfolio would affect profit and capital as well. The most common risks emerged with off-balance sheet commitments are credit, liquidity, operational, market risk and capital adequacy risk. Khambata and Hirche (2002) categorized off-balance sheet activities of commercial banks into off-balance sheet commitments, market-related activities (financial derivatives) and advisory or management functions. In off-balance sheet commitments, the bank underwrites the obligations of the third party and stand behind the risk on behalf of the customer. In this context, the bank earns fee income without disclosing any asset or liabilities on its balance sheet and thus, this activity is considered as an off-balance sheet activity. The credit risk will appear when there is a default by the counterparty. In this case, the default by the counterparty will trigger an immediate loss that will cause liquidity challenge.

In today's banking industry, off-balance sheet activities become the major operation and its volume is increasing from time to time Chanb, Sasa Žikovićc and Pinar Evrim-Mandacid (2016). In Ethiopian context, in recent years, the requirement of the National Bank, that each bank to buy NBE bills for each disbursement of loans create a liquidity challenge and stiff competition in the industry to increase deposit. Besides, stringent reporting requirement on on-balance sheet items like loans, marginal gap between effective interest rate and cost of funds and relative deregulation in the off-balance sheet commitments, obligate commercial banks to divert their attention to off-balance sheet commitments particularly letters of guarantees to subsidize their profit as it does not require immediate cash out flow unlike loans and investors usually demands high return on their investment.

As one cause of the credit, liquidity, operational, and capital adequacy risk, most off-balance sheet commitments in principle have no difference from those associated with on-balance-sheet business. It is therefore suggested that off-balance-sheet risks should get enough attention and regarded as an integral part of banks' overall risk profiles. Supervisors

consider it particularly important that banks adopt a coordinated approach to off-balance sheet management and pay special attention to the possible correlation of different types of risk, both within the individual bank and the banking group as a whole.

In this study, the researcher disclosed the overall risk of OBC by investigating its relationship with risk & returns and assessing the quality of the risk management system. To the best of my knowledge, since, he researcher could not find any study dealing with this topic in Ethiopia, except the one that is somehow related and issued by Tamrat (2013), Determinants of commercial banks OB activities. Tamrat aimed to test the tax regulatory hypothesis and market discipline hypothesis in determining OBS activities of Ethiopian commercial banks using panel data set during the period of 2005-2012, with a sample of eight big sized Ethiopian commercial banks including the giant CBE. His study adopted only quantitative research approach. The model considers the impact of size, profitability, loan, credit risk, efficiency, market concentration, capital adequacy, reserve requirement, real GDP, interest rate spread and inflation on off balance sheet activities of banks. And, his result showed that all bank-specific determinants, with the exception of credit risk and loan, significantly affect commercial banks off balance sheet activities in Ethiopia. On the contrary, in order to assess the overall risk of the product, the researcher focused on the impact of off-balance sheet commitments on Ethiopian private commercial bank's risk & profitability and the quality of off-balance sheet commitments management practice using both quantitative and qualitative data in selected eleven private banks for 10 years period to end June 2019.

1.2 Statement of the Problem

According to Suning Zhang (2006), off-balance-sheet activities receive increased attention in the post-Enron world. Increase in Off-balance sheet financing arrangements and their "hidden" nature, as highlighted by the Enron scandal, have led to organizational failure. In Ethiopian case, bank's commitments from OB activities are increasing from time to time. In this case, without disclosing any asset or liabilities on their balance sheet, bank's earns huge fee income. The risks will appear when there is a default by the counterparty. Apart from the credit risks, settlement risk, liquidity risk, interest rate risk foreign exchange risk and operational risks would emerge from such activities Khambata and Bagdi (2003). OBC are harder to track and became hidden liabilities of the financial institutions. Unlike on-

balance sheet items, investors and lenders have no information about these contingent liabilities as there is no regulatory requirement requiring disclosure of same. More to this, the regulatory organs has no reporting requirement on defaulted off-balance sheet commitments, doesn't require reserve for possible claims and no regulatory limits requiring the existing bank reduce their risk exposure unlike on-balance sheet risk like credit. According to Chaundhry (2007) OBC shall have similar general risk management system like direct loan portfolio. Banks with huge level of OBC should have written polices approved by the board addressing the issue. Besides, regulators shall provide the right direction by which such commitments managed as the level of association between risk of failure and non-bank activities increases when there is no tight regulation on such activities (Boyd and Graham (1986). As a result, the positive relationship between the two variables disappears when there are more stringent rules and regulations.

There are a lot of studies on impact of off-balance sheet items on banks performance in other countries. However, in Ethiopia, there are a very less number of studies that have been made unlike the on balance sheet ones. Even in the studies conducted outside Ethiopia, it is observed that most of the studies were relating to impact of OBC on various risks instead of its risk management practice. Besides, there were studies relating to profitability of banks in relation to these activities and whether there is efficiency of banks to generate profit out of OBS activities. So, there is a gap that no study has been made about the off-balance sheet commitment management practice and the empirical relationship between Off-balance sheet commitments and risk or return to determine the overall risk of the product thought exposure in off-balance sheet commitments is increasing at an increasing trend. So, by observing this fact, this study is taken up with the private commercial banks in Ethiopia to assess the overall risk of OBC by examining:

1. How off-balance sheet commitments affect risk and return?
2. How the existing off-balance sheet commitments management is being practiced?

In line with the research questions and objectives, some hypotheses are tested. Hypotheses of the study stands on the theories related to OBC that has been developed over the years by banking area researcher's and past empirical studies related to a bank's OBS activities. The results from the literature review were used to establish expectations for the relationship of the independent and dependent variables.

1.3 Objectives of the Study

1.3.1 General Objective of the Study

The aim of this study is to assess the overall risk of Ethiopian private commercial banks OBC by investigating the relationship between OBC and performance in terms of risk and return; and by assessing how the existing OBC management is being practiced.

1.3.2 Specific Objectives

Within the above general objective, the study sought to achieve the following specific objectives:

i. Assess how private commercial bank's manage their off-balance sheet commitments,
ii. Identify, understand and draw a chain of causality between off-balance sheet commitments and credit risk,
iii. Identify, understand and draw a chain of causality between off-balance sheet commitments and liquidity risk,
iv. Identify, understand and draw chain of causality between off-balance sheet commitments and capital adequacy,
v. Identify, understand and draw a chain of causality between off-balance sheet commitments and revenue growth, and
vi. Identify, understand and draw a chain of causality between off-balance sheet commitments and ROE.

1.4 Significance of the Study

Ethiopia is a developing economy and the banking sector is playing an important role in the national development. In recent years, off-balance sheet commitments have got substantial importance due to increase in the construction sector and stiff competition in the banking industry especially for deposit. As a result, there is an increased demand for the adoption of effective OBC management frameworks to ensure the continuity and survival of individual banks and ensure the safety and soundness of the financial system. Whereas, the continuity and success of banks considerably depend upon risk management (Pastor, 1999;

Kao et al. 2011; Scarborough, 2011) therefore, this study aims to contribute to the on-going debate of the relationship between OBC and risk/return and how off-balance sheet commitment management practice of the industry gaped as compared with the on balance sheet ones that urge senior management, board and policy makers to give attention on this area as the overall risk is a combination of both the inherent risk and the risk management system of the product.

Therefore, the purpose of this study is to assess off-balance sheet commitments management practice of private banks and evaluate the impact of off-balance sheet commitments on the banks performance. In doing so, an in-depth understanding of the OBC management practice and level of the commitments are important to examine it's impact on performance of banks. Therefore, the study adopts both descriptive and analytical model to assess the existing practice and identify the cause and effect relationship between the independent variable, that is the OBC and the dependent variables that is the bank's risk and return. Unlike most empirical studies like Al-tahat and AbuNgira, (2016) that focuses on the level of off-balance sheet commitments with risk this approach focuses on examining the OBC management practice and exposure impact. Besides, in Ethiopian context, to the best of my knowledge, since there is no related studies in the subject except the one issued by Tamrat Kassa in titled 'Determinant factors of off-balance sheet activities' (2013); that focuses on factors determines off-balance sheet risk this study provides new insights in the existing literature by presenting a broader view of the quality of OBC management practice apart from the inherent risk of the product i.e its impact on risk and return.

To conclude, the importance of the study arises from the importance of off-balance sheet activities as a source of revenue worthwhile, but many of the risks affecting the continuity and survival of banks may occur. It also helps the banks managements, particularly the risk management at a bank and the related parties, to implement and promote good off-balance sheet risk management system in this field. It also helps in determining the impact of off-balance sheet activities in causing banking risks that may not be easy to address by the banks, and therefore the focusing on these activities, and on the ways to cope with the hazards involved to maintain the pace of banking activity and to increase its growth. Finally it will also help the regulator; the National Bank of Ethiopia to closely follow the level of

OBC, its risk level, and quality of the risk management system employed by banks and address problem ahead of time by issuing commensurate directives.

1.5 Scope and Limitation

For the purpose of this study, OBC refers only Letters of Guarantee and Letters of Credit facility. The study mainly focused on assessing the off balance sheet commitments management practice and impact of off-balance sheet commitments on Ethiopian private commercial banking sector risk and return only. In order to assess the OBC management practice, respondents view is gathered concerning guarantee commitment only as LC commitments usually approved with loan facility even if it is off-balance sheet items.

Even if lots of risk can be emerged from such activities, the researcher limits impact of OBC on the bank's credit, liquidity and capital adequacy risks. Likewise, the researcher use only gross revenue and ROE to measure impact of OBC on return. The study was conducted using both qualitative and quantitative data. Primary qualitative data were gathered in the form of questionnaire from eleven private commercial banks out of sixteen operating in the country while the secondary data for the whole sixteen private bank were gathered from NBE for the past ten years to end June 2019. Since the play fields for private and government banks are somehow different; as government related transactions are solely administered via CBE, I excluded the only government commercial bank in the country that is Commercial Bank of Ethiopia in this regard.

1.6 Organization of the Paper

The paper is organized in five Chapters. Following the Abstract, the first Chapter deals with introduction of the study; including background of the study, statement of the problem, objective of the study, significance of the study and limitation of the study. The second Chapter comprises an overview of related literatures and theoretical framework focusing on what off-balance sheet commitments are and how it is viewed from theoretical and practical point of view. Chapter three, thoroughly discussed the research methodology of the study, Chapter four endeavored to present, analyze and interpret data sought from both primary and secondary sources and the last but not the least chapter five disclosed the summary, conclusion and recommendation part.

CHAPTER TWO
2. REVIEW OF RELATED LITRATURES

2.1 Introduction

This chapter presents a review of related literatures to provide foundation of knowledge on the topic and to revise as background for the study. It incorporates theoretical review of the subject matter and empirical studies by other scholars. Studies in OBC management, and impact on risk and return was not highly conducted as that off on balance sheet items especially in Ethiopia and that was the major problem encountered during the study.

2.2 Understanding and Categorizing Off-balance sheet Commitments

According to Obay L. (2013), off-balance sheet items are banking product and services that causes contingent asset or liability that are not reflected in the balance sheet portfolio. Banks engage in a variety of OBC: letters of guarantee, financial standby letters of credit, performance standby letters of credit, commercial and similar letters of credit and loan commitments. These different types of OBC present heterogeneous characteristics and thus could impact differently banks' risk exposure. However, it is possible to classify these activities in one main category: loans substitute. The most common risk associated with off-balance sheet activities is credit risk as credit risk includes all risks caused by counterparty failure. Besides, an unanticipated change in the counterparties' credit standing during the life of the off-balance sheet transaction may also lead to liquidity risk as the financial; institution is expected to immediately settle any claim arising out of it. OBC may also aggravate the bank's operational risk and market risks.

In guarantees, the bank underwrites the obligations of the third party and stands behind the risk Obay L. (2013). A letter of guarantee issued by a bank is a written promise by the bank to compensate (pay a sum of money) to the beneficiary (local or foreign) in the event that the obligor fails to honor his/her/its obligations in accordance with the terms and conditions of the guarantee/agreement/contract. All bank guarantees are irrevocable obligations of the bank to pay a sum of money to the beneficiary in the event of non-performance by the customer. The beneficiary of the guarantee may be an individual or business located locally or abroad.

In this context, the bank earns fee income without putting any asset or liabilities on its balance sheet and thus, this activity is considered as an off-balance sheet activity. The credit and liquidity risk will appear when there is a default by the counterparty. In this case, the default by the counterparty will trigger an immediate payment and loss that will cause the bank to acquire a substandard claim. There are different classes of guarantee like bid bod, supplier's credit, advance payment, performance bond, retention bond and custom duty bond etc. Besides, Banks may also involve in LC commitment to settle commitment on behalf of the importer in case the importer fails to owner his commitment on time.

According to Saunders and Cornett (2008), off-balance sheet risk is the possibility of losses faced by banks owing to have the contingent assets and liabilities within the banking transactions. For instance a standby letter of credit, guarantees issued by a bank is a contingent liability and is interconnected with off-balance sheet risk. Banks should evolve adequate framework for managing their exposure in off-balance sheet products like guarantees and forex commitments (LC) as a part of overall credit to individual customer relationship and subject to the same credit appraisal, limits and monitoring procedures. As per Banks for International settlement publication (1986), Banks should classify their off-balance sheet exposures into three broad categories - full risk (credit substitutes), money guarantees, etc, medium risk and low risk depending on their level of risk to earning and capital.

2.3 Off Balance Sheet Commitment Management

As per NBE risk management Guideline (2010), the board of directors is the ultimate responsible body for managing the overall risk assumed by the Bank. Therefore, regarding OBS risk, the board has the overall responsibility to review the bank's off balance sheet risk strategy and policies. Banks expected to develop a strategy that sets the objectives of its off-balance sheet undertakings and adopts the necessary policies and procedures for conducting such activities. Senior management shall also has the responsibility to develop procedures in order to implement the off-balance sheet risk policy or strategy approved by the board and for the development of policies and procedures for identifying, measuring, monitoring and controlling off-balance sheet risk. Such policies and procedures should address off-balance sheet risk in all of the bank's activities at both the individual off-balance sheet and

portfolio levels. Senior management must ensure that there is a periodic independent internal or external assessment of the bank's off-balance sheet management functions.

Identification of existing and potential risks in the bank's product and services is the corner stone for risk management (NBE Risk Management guideline, 2010). This quests the need for development and implementation of clearly defined written policies, which set out the off-balance sheet risk philosophy of the bank and the parameters under which off-balance sheet risk is to be controlled. The policies should be designed and implemented with consideration for internal and external factors such as the bank's market position, trade area, staff capabilities and technology; and should particularly establish targets for portfolio mix and exposure limits to single counterparties, groups of connected counterparties, industries or economic sectors, geographic regions and specific products.

To ensure diversification, exposure limits are needed in all areas of the bank's activities that involve off-balance sheet risk. Banks should establish off-balance sheet limits for individual counterparties and groups of connected counterparties that aggregate different types of on and off balance sheet exposures. Such limits are frequently based on internal risk ratings that allow higher exposure limits for counterparties with higher ratings. Limits should also be established for particular industries or economic sectors, geographic regions specific products, a class of security, and group of associated borrowers. NBE, (2010)

Bank shall devise number of techniques that mitigates risks emanating from off-balance sheet commitments. Covenant's and personal guarantees are the most commonly used. Notwithstanding the use of various mitigation techniques individual off-balance sheets transactions should be entered into primarily on the strength of the customer's capacity to honour its commitments on time. Banks should also be mindful that the value of collateral might well be impaired by the same factors that have led to the diminished recoverability of the off-balance sheet. NBE, (2010).

2.4 The Role of the Supervisor in Monitoring OBS Exposures

The very reason for existence of the regulator body in our case the National Bank of Ethiopia is to ensure the safety and soundness of the financial system and build confidence of the public on those institutions. In relation to OBC supervisory authorities need to ensure that banks are adopting appropriate procedures to measure and control the risks. The Banks

for International Settlement, in its publication, 'The management of Banks off-balance sheet exposures (1986) indicates three main elements in the development of supervisory approaches to off-balance-sheet risk.

According to BASEL (1986), the first element is for supervisors to keep abreast of new developments by engaging in dialogue with banks and other interested parties, the second element is to review prudential reporting systems to ensure that all major off-balance-sheet activities are adequately captured in supervisory returns. Whatever degree of detail is deemed necessary in different countries; supervisory authorities in the Group of Ten intend to review their existing systems of reporting as a matter of urgency to ensure that they adequately capture the full range of different off-balance-sheet activities in which banks are involved.

The third element is to review supervisory policies to ensure that they take full account of developments in off-balance-sheet business. The analysis gives an indication of supervisory thinking at this stage. At national level, supervisors are giving particular consideration to the modifications which may be needed to their measurement of capital adequacy in respect of some of the most significant off-balance-sheet activities, perhaps weighted according to the degree of perceived risk. They will endeavour to ensure that any measures they introduce are sufficiently flexible and robust to be able to incorporate new instruments which may subsequently be devised. It is recognised, however, that it will not be possible to construct a supervisory approach which is wholly comprehensive and that supervisors will have to continue to make qualitative judgements about some of the activities in which banks engage BASEL (1986).

2.5 Theoretical Review

2.5.1 Diversification Hypothesis

Financial institutions in recent years have increasingly been engaging in off-balance sheet activities. Uzhegova (2010) noted that the decline in interest margins, has forced banks to search alternative sources of revenues, leading to diversification into non-traditional financial operations. The concept of revenue diversification follows the concept of portfolio theory by Harry Markowitz (1952), which states that individuals can reduce firm-specific risk by diversifying their portfolios. The proponents of income diversification or product

mix for banks argue that diversification provides a stable and less volatile income, economies of scope and scale, and the ability to leverage managerial efficiency across products (Choi and Kotrozo, 2006). Chiorazzo et. el (2008) noted that as a result of trading in loan commitments and letters of credit, as part of the restructuring of commercial banks in Ghana lead to increase in the efficiency and profitability of the banks due to increased income and decreased portfolio risk. They further argued that the diversified portfolio reduces total risks because income from non-interest activities is not correlated or at least perfectly correlated with income from fee based activities and as such diversification should stabilize operating income and give rise to a more stable stream of profits (Uzhegova, 2010).

The opposite argument to diversification to non-traditional banking activities is that it leads to increased agency costs, increased organizational complexity, and more so banking risks. Kotrozo and Choi (2006) mentioned that diversification to off-balance sheet activities resulted in increased credit risk and market risk for commercial banks in the Philippines. They further argued that the benefits of the diversification, being increased income will only be felt by the banks only if the income generated is commensurate to the risks associated with engaging in the off-balance sheet activities. As such, the benefits of diversification and performance of banks would resemble an inverted-U in which there would be an optimal level of diversification beyond which benefits would begin to decline and may ultimately become negative.

2.6. Empirical Studies

According to Edwards and Mishkin (1995), the rate of traditional banking has been decreasing while the OBS activities have been increasing. Decreasing profitability of traditional banking and increasing competitiveness of markets actually forces banks to undertake OBS activities. Another writer (Buckova, 2012), pointed out that the off-balance sheet activities have become very important part of the banking business, and that the nominal value of the off-balance sheet activities had several times exceeded the value of loans and advances in the balance sheet at a time the growing importance of these activities increase. So, it is become top priority to manage the risks emerging from these activities, most important of which is the management of the credit, operation and liquidity risk.

A study by Nachane D.M and Ghosh S (2007), pointed that banks uses this products as a means to surge profits, so as to substantiate the decline in the income from the on-balance

sheet lending businesses. In such conditions, larger banks are able to lead the specialized management skills, required to deal with the outcome of the off-balance sheet activities, and the ratio of the loans as well (loans to total assets) tends to be directly related to the off-balance sheet commitments, and that the profitability positively affect the volume of the off-balance sheet activities. However, small and medium size banks suffers a lot from the risk associated with unplanned commitment due to absence of specialized management skill to handle such items. Some writers like Aktan, et, al, 2013,claimed that off-balance sheet activities, such as guarantee sometimes become the main sources of bank income, besides contributing for high profits, banks can evade regulatory costs or taxes, because the reserve requirements and insurance premiums on deposits are not imposed on the off-balance sheet activities.

Off-balance sheet activities play an important role in helping the banks increase profitability, while keeping the details of these earnings off from their balance sheet. This makes the banks to extend their leverage against their capital adequacy requirements and maximize the return on invested capital. Likewise, some writers like Khambata (1989) argued commitment in the off-balance sheet activities also help to increase the commercial banks' scope of operations, and diversification of product lines and earnings.

Nevertheless, some writers like Hassan et al. (1993), off-balance sheet activities such as guarantees will deteriorate banks' performance because the bank is obligated to make payments in future under certain conditions, which may appear to be unfavorable to the bank. In addition, off-balance sheet activities can lead to increase in credit risk because these activities provide an opportunity to increase leverage significantly without additional regulatory requirements. On top of this, among these studies, non-bank activities were positively related to the risk of the banks during the period 1971-1977 as per a study by Boyd and Graham (1986). They highlighted that the level of association between risk of failure and non-bank activities increases when there is no tight regulation on non-bank activities. As a result, the positive relationship between the two variables disappears when there are more stringent regulations. DeYoung & Roland, (2001) found that the banks' earnings volatility increased when banks tilted their product mixes towards fee based activities and away from traditional intermediation activities. Laetitia Lepetit, Emmanuelle

Nys, Philippe Rous, and Amine Taraz, (2005) also stressed banks which expanded into non-interest income activities, presented a higher level of risk than banks which principally supplied traditional intermediation activities.

Later, Karim and Gee (2007) examined how OBS activities of the locally owned commercial banks in Malaysia affected the performance of the banks through banks' exposure to various forms of risks, bank profit, leverage and liquidity by conducting a panel regression and indicated that only the market risk is significantly positively related with OBS activities. According to them, this might be due to the fact that OBS activities were not the main source of funds for these banks since the use of OBS items was still in its emerging phase. In addition, they found that the stock returns were negatively related to OBS activities. There was no significant relationship between return on equity, leverage and liquidity ratio with the OBS activities.

The results show that the bank's unsystematic risk is positively correlated with the OBS activities and is significant at the 10% level. This indicates that OBS activities induce risk on individual bank's operation and management; indicating the need to carefully evaluate their engagement in OBS activities in the banking operations so as to reduce bank's exposure. In addition, OBS activities are found to increase risk exposure of the banking industry as a whole. More to this, As per Saqer Sulaiman Al-Tahat and Nourdeen Mohammed AbuNqira, (2016), there is a significant association between the Off-Balance Sheet Activities and the capital adequacy risks, market risks, liquidity risks and revenue growth, that the relationships are negative for capital adequacy and positive for market risk, liquidity risk and revenue growth. No significant association was evidenced between the Off-Balance Sheet Activities and credit risk and leverage risk.

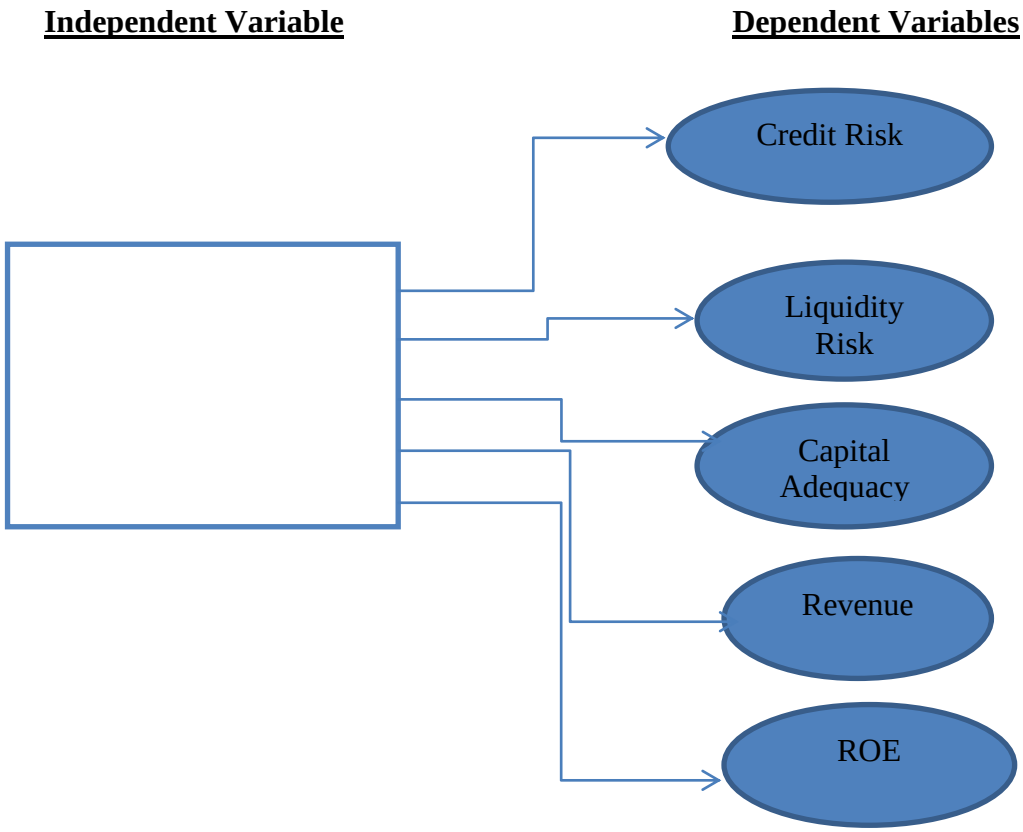
Although there has been an increasing trend in Ethiopian private commercial bank OBC, to best of my knowledge, there are no studies which examine the effects of OBC on the bank's performance and or OBC management practice of such banks except the one studied by Tamrat Kasa (2003), Determinates of Off-balance sheet activities of Ethiopian commercial banks. Tamrat tried to determine the impact of, size, profitability, loan, credit risk, efficiency, market concentration, capital adequacy, reserve requirement, real GDP, interest

rate spread and inflation on off balance sheet activities of banks. His results showed that all bank-specific determinants, with the exception of credit risk and loan, significantly affect commercial banks off balance sheet activities in Ethiopia. On the contrary, I will try to study the off-balance sheet risk management practice and its impact on risk and return.

2.7 Conceptual Frame Work

The research adopts two conceptual frameworks: where OBC is taken as an independent variable while bank risks & return is a dependent variable and how OBC management is practiced as illustrated in the following two conceptual frame work figures to reveal the inherent risk of the product and the quality of the industry's risk management system.

Fig 1. Conceptual frame Work: Variable Relationship (Inherent Risk of OBC)



Source: Researcher own presntation based on review of related litratures

Fig 2. Conceptual frame Work: OBC Risk Management System

Source: Researcherown presntation based on review of related litratures

CHAPTER THREE
3. RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the fundamental research methodology and the choice of the research approaches employed to make the study. It involves the general research design, sampling methodologies, data type and collection mechanisms, measuring variable, study models, and data presentation & analysis techniques.

3.2 Research Design

Both descriptive and analytical research method were employed to make the study. According to Kothari (2004), descriptive research attempts to describe systematically a situation, problem, phenomena and provides information about the current condition between the variables under study in this case the off balance sheet commitments management practice. Therefore, qualitative data were collected in the form of questionnaire and analysed in order to describe the specific phenomenon in its current practice, trends, current events and linkages between different factors at the current time. Descriptive research design was chosen because it enables the researcher to generalise the findings to a larger population. This study therefore was able to generalise the findings to all the private commercial banks operating in Ethiopia. Besides, analytical research approach is also employed to assess the impact of OBC on the performance of private commercial banks risk and return.

3.3 Sampling Method

According to Kothari (2004), a sample design is a definite plan for obtaining a sample from a given population. It refers to the technique or the procedure the researcher would adopt in selecting items for the sample design may as well lay down the number of items to be included in the sample i.e., the size of the sample. Sample design is determined before data are collected. The universe to be studied in this research is private banks operating in Ethiopia which are sixteen in number. The researcher cluster the banks based on their year of service in to three (big banks; stayed in the industry for 20 years and above, medium

banks; between 10 to 19 years inclusive and small banks; less than 10 years) and randomly select four bank's from big sized, four bank from medium sized and three banks from small sized banks to consider at least one third form each from each of the three categories. Staffs working in this bank were the target group to get first-hand information in the subject. The researcher also purposefully selected various functions from each sample banks using judgmental sampling method to target staffs that have proximity to the subject matter. Based on that, Credit Department, Risk Management Department, Audit Department, Legal Department and Operations /Branches are selected as a sampling unit and staffs operating in theses unit are considered to determine the sample size using Solvins sample size determination formula: $n = N/ (1+N (e)^2$, where e represents acceptable magnitude of error (0.05%).

S/N	Department	Expected Staff size in 11 banks (Population)	Sample size (n)	Sample for each bank
1	Risk Department	66	35	4
2	Audit Department	110	57	6
3	Credit Department	132	68	7
4	Branches Managers	11	6	1
5	Legal Department	55	29	3
	Total	374	195	21

3.4 Data Type and Collection

The study employed both primary and secondary data. Primary data were gathered in the form of questionnaire. The questionnaire was designed to include both open and closed ended questions. Open ended question was sought to prompt more thinking from the respondents while closed ended questions were used to standardize responses and ease on respondents' time taken to fill. Five-point likert scale was used to determine their agreement level with their off-balance sheet commitments management system. 205 questionnaires was distributed considering some might not be collected and 146 managed to be collected. Besides, secondary data that already exists and had been collected or even analyzed for other purposes other than the purpose of the current study was gathered from NBE and from individual banks. Data from NBE includes off balance sheet commitments, balance sheets and Income statements figures of all private banks operating in Ethiopia and data from the

individual banks include their annual report and quarterly CAMEL rating report by NBE covering ten years period from 2010-2019.

3.5 Measuring Variables and Models of the Study

Impact and relationship between the independent variable; OBC was assessed on the dependents variables (various bank risks like credit, liquidity, and capital adequacy and profitability in terms of revenue and ROE).

The Dependent Variables,

i. Credit risk:

Nonperforming Loans to total Loans Risk (NPL): This ratio is calculated by dividing non-performing loans to total loans of the private banking industry. The ratio was obtained from CAMEL rating report of NBE.

$$NPLr, = \beta 0 + \beta 1\ OBS + e$$

ii. Capital Adequacy Risk

Capital Adequacy Risk (CAR): This ratio measures the capital adequacy held by the bank to face the risks that might be exposed to. It is calculated as follows: Capital adequacy ratio will be found by dividing primary capital of the bank to it's risk weighted assets. The ratio was obtained from CAMEL rating report of NBE.

$$CAR., = \beta 0 + \beta 1 OBS + e$$

iii. Liquidity Risk

Liquidity Risk (LIQR): This ratio is obtained from annual report of individual bank. It is calculated by dividing liquid asset by net current liabilities as per the National Bank of Ethiopia Directive definition for liquid asset and current liabilities,

$$LIQR, = \beta 0 + \beta 1\ OBS + e$$

vi. Profitability

Profitability gross Revenue and ROE, was used as a variable to see impact of OBC on profitability. The data was gathered from the National Bank of Ethiopia and CAMEL rating report of individual banks

$$Rev, = \beta 0 + \beta 1 OBS + e$$

$$ROE, = \beta 0 + \beta 1 OBS + e$$

3.6 Data Presentation and Analysis

Data analysis is the process of systematically searching, arranging, organizing, and breaking data into manageable units, synthesizing the data, searching for patterns, discovering what is important and what is to be learned (Arne Duss, 2003).

The collected data is thoroughly examined and checked for completeness and comprehensiveness. The data is summarized, coded and tabulated. Descriptive statistics such as means, standard deviation and frequency distribution were used to analyse the data SPSS version 23 were used to perform the analysis as it helps in organizing and summarizing the data by the use of descriptive statistics such as charts, frequency tables and percentages. This ensured that the gathered information was clearly understood.

Moreover, risk of commercial banks is measured using the NPL ratio, liquidity ratio and capital adequacy ratio which is derived by dividing the non-performing loans by total loan portfolio, liquid assets by deposit, and primary capital by risk weighted assets. Profitability is also assessed using growth in revenue and ROE, which is calculated by dividing net income and total average capital. The researcher also observed the behaviour of each of these variables at each scale of the off-balance sheet activities on an annual basis. After that, the ratios obtained were regressed against OBC sum obtained from NBE for ten years to determine whether the ratios are driven by OBC. This was to help determine whether the scale of the OBC has any impact on the operations and soundness of the banks through the impact on the variables that drive risk and return of private commercial banks. Besides, mean as well as standard deviation measures are utilized to analyse the data and to make a broad argument to answer the particular research questions. Furthermore, the researcher used correlation, ANOVA fitness of good, normality and linearity test to ensure relationship between the variables and fitness of the model and validity of the data. SPSS was applied to analyse descriptive statistics, correlation and regression analyses.

H01: There is no statistically significant effect of off-balance sheet commitments on credit risks of Ethiopian commercial private banks.

H02: There is no statistically significant effect of off-balance sheet commitments on capital adequacy risks of the Ethiopian private commercial banks.

H03: There is no statistically significant effect of off-balance sheet commitments on liquidity risks of the Ethiopian private commercial banks.

H04: There is no statistically significant effect of off-balance sheet commitments on revenue of Ethiopian private commercial bank.

H05: There is no statistically significant effect of off-balance sheet commitments on ROE of Ethiopian private commercial bank

3.7 Ethical Consideration

The researcher used structured questionnaire based on credit management factors indicated on Bryman and Bell (2013) and NBE Risk Management Guideline (2010). Research permission and supporting letter was secured from Addis Ababa University and same is presented for applicable organs in the process of data collection.

The survey was conducted by distributing questionnaire to employees of selected banks. The researcher targeted some departments in banks that assumed to have better understanding of the subject matter and randomly distributed the questionnaire to those staffs working in the selected departments.

Being a former staff NBE, the researcher well understand the sensitivity of the information in eroding public confidence on the sector. Therefore, as much as possible, that data collected from individual bank and NBE kept confidential in a way that no bank name and information is mentioned in the study rather the industry data is used.

3.8 Tests of Assumptions: Data Validity and Reliability

This section displays three different pre-estimation tests conducted for checking whether the collected data is fit to continue with the rest of the analysis. The tests include; normality test, linearity test and Pearson correlations which is expressed below.

3.8.1 Normality

Normality test is used to determine if a data set is well modeled by a data distribution and to compute how likely it is for a random variable underlining the data set to be normally distributed. With this consent a normality test is conducted to assess the data, most of the dependent variables: liquidity risk, capital adequacy risk revenue and ROE (except credit risk) has normal distribution. Thus, it can be concluded, looking at the curve in the histogram, as the data is fit and symmetrically distributed in both sides without being skewed as shown in Appendix VI.

3.8.2 Linearity

Test of linearity is performed to identify the linearity of the dependent variables using a Normal P-P Plot. With this regard, Pallant (2010) states that when the points lie in a reasonably straight diagonal line from bottom left to top right in the Normal P-P Plot, this would suggest no major deviations from normality. As can be seen from Appendix VI, observations lie along the diagonal line from bottom left to top right reasonably so, all the dependent variables except credit risk can be considered as linear.

3.8.3 Pearson Correlation Assessment

Pearson correlation assessment is made to identify the level of linear association between the independent variable OBC and risks and return. The correlation coefficient is calculated between each of the associated risk and return. A Pearson Correlation Coefficient of ±0.91 to ±1.00 is considered Very strong, ±0.71 to ±0.90 is considered as High, ±0.41 to ±0.70 is assumed as Moderate, ±0.21 to ±0.40 is assumed as Small but definite relationship, and ±0.00 to ±0.20 is considered as Slight, which is almost negligible (Hair, Money, Samouel, & Page, (2007).

Accordingly, as it is noted in regression analysis under section 4.4 result indicated OBC is significantly negatively correlated with the capital adequacy and liquidity, significantly positively correlated with revenue and has negative insignificant relationship with credit risk and ROE.

CHAPTER IV

4. DATA PRESENTATION, DISCUSSION AND ANALYSIS OF RESULTS

4.1 Introduction

This chapter presents analyses and interprets primary as well as secondary data collected to make the study. The chapter first assess the inherent risk of OBC by investigating its relationship with the bank's Credit Risks, Liquidity Risk, Capital Adequacy, Revenue and ROE using correlation analysis, coefficient of determination and regression analysis by using the data gathered from the NBE and individual banks for the past 10 years to June 2019. Later, it assess the quality of OBC risk management system: how OBC management practice of Ethiopian private commercial banks looks like including the role of NBE using primary data gathered from 146 respondents working in 11 private commercial banks using descriptive statistics techniques.

4.2 Off-Balance Sheet Exposure of Private Banks

Table 1: Trends of Off-balance Sheet Commitments (*Amount in millions of Br.)*

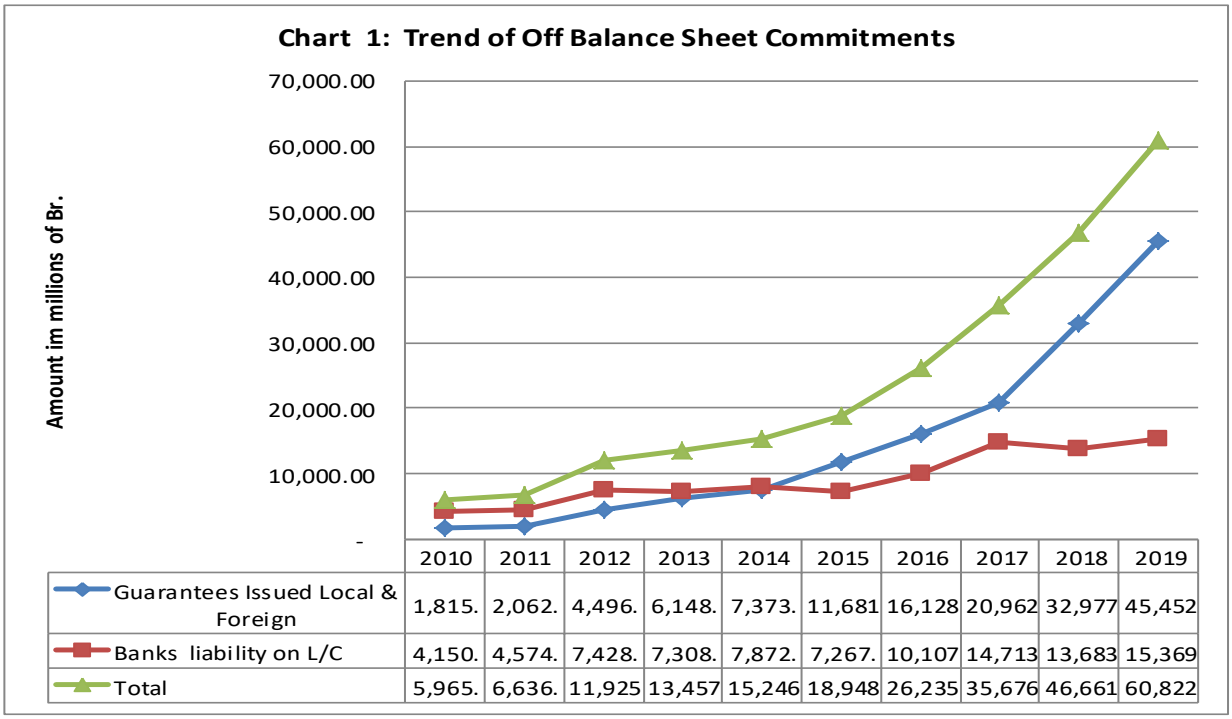
Year	Guarantee	LC	Total OBC	Core Capital (CC)	Total Deposit (TD)	Growth (%)		
						OBC	TD	CC
2010	1,815.64	4,150.30	5,965.94	5,293.80	38,540.79			
2011	2,062.25	4,574.11	6,636.36	6,955.06	50,256.59	11.24%	30.40%	31.38%
2012	4,496.26	7,428.79	11,925.06	9,043.24	59,664.94	79.69%	18.72 %	30.02%
2013	6,148.17	7,308.99	13,457.16	11,067.01	76,625.13	12.85%	28.43%	22.38%
2014	7,373.77	7,872.57	15,246.34	14,909.45	92,105.91	13.30%	20.20%	34.72%
2015	11,681.38	7,267.52	18,948.90	18,079.18	117,527.85	24.28%	27.60%	21.26%
2016	16,128.62	14,713.86	30,842.48	22,315.13	145,672.07	62.77%	23.95%	23.43%
2017	20,962.16	14,713.86	35,676.02	28,501.15	199,051.56	15.67%	36.64%	27.72%
2018	32,977.74	13,683.29	46,661.03	35,747.68	278,427.89	30.79%	39.88%	25.43%
2019	45,452.43	15,369.94	60,822.37	49,124.54	357,903.00	30.35%	28.54%	39.71%

Source: NBE and own computation

The study finding revealed using off-balance sheet items as a means of increasing revenue has been increasing from time to time. During the study period off-balance sheet commitments of Ethiopian private commercial banks has increased by 919.5% unlike their total asset and capital that has shown an increment of 799.8% and 843.4% respectively. Especially, guarantee commitment has shown an increment of 2,403.4% during the past ten

years to June 2019; and by 221.0% for the past five years to June 2019; indicating the increase trend in using off balance sheet commitments in Ethiopian private Bank as a means of diversifying income like the studies conducted by Uzoma et el, (2007), and Al-Tahat1 et el, (2016) on Jordanian Commercial Banks; Off-balance sheet commitments become important element and their balance is increasing from time to time nearly by 24.46% for the study period which were 5 years to end 2014. However the study result is completely different from the one studied by Tamrat (2013) as he concluded the growth of OBC is less than the growth of commercial banks' total assets during the period 2005-2012 (8 years) on eight banks (two government bank CBE CBB and six big private banks) and that indicated using OBC as a means of diversifying risk and return is at early stage as compared to other countries.

Chart 1: Trend of Off Balance Sheet Commitments



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Guarantees Issued Local & Foreign	1,815.	2,062.	4,496.	6,148.	7,373.	11,681	16,128	20,962	32,977	45,452
Banks liability on L/C	4,150.	4,574.	7,428.	7,308.	7,872.	7,267.	10,107	14,713	13,683	15,369
Total	5,965.	6,636.	11,925	13,457	15,246	18,948	26,235	35,676	46,661	60,822

Source: NBE and own presentation

The graph above shows there is a continues annual increase in the value of OBC; growth percentage ranges from 11.24% to 79.69% per year during the study period from 2010 to 2019 or from Br 5.97 billion in year 2010 to Br. 60.822 billion in year 2019 and growing concern over the associated risk as it requires commensurate risk management, monitoring and control system in order to balance the risk and the benefit sought from this product.

4.3 Impact of Off-Balance Sheet Commitment on Risk and Return

4.3.1 Impact of Off Balance sheet Commitments on Credit Risk

i. Descriptive Statistics

	Mean	Std. Deviation	N
NPL %	3.3720	1.68871	10
OBC (Amount '000,000)	24618.1650	18362.26895	10

Source: NBE and own computation

As per the above table mean NPL ratio of the private banks' was 3.37% with standard deviation of 1.69% and mean OBC was br. 24.618 billion with standard deviation of br. 18.362 billion. The mean NPL ratio of the industry indicated the ratio is within the maximum allowable limit of 5.0% set by NBE.

ii. Correlations

		NPL	OBC
Pearson Correlation	NPL	1.000	-.269
	OBC	-.269	1.000
Sig. (1-tailed)	NPL	.	.226
	OBC	.226	.
N	NPL	10	10
	OBC	10	10

Source: NBE and own computation

Using the above correlation result, the study finding indicated the relation between credit risk and OBC is weak, negative (-0.269) and yet insignificant as expressed by Sig value of 0.452. This may be due to the fact that default in OBC may not be converted to loan and may be held as collection from customer /Accounts receivable/ as justified by the primary data that 130 respondent (89.04%) indicated the bank prefer to extend the guarantee period or convert claimed guarantees to other receivables than loans. The practice enables the banks to reduce their NPL loan, subsequent ratio and associated provision held for deteriorated loans.

iii. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	-.269[a]	.072	-.044	1.72508	.072	.624	1	8	.452

a. Predictors: (Constant), OBCSUM

From the above table, the coefficient of determination also indicated the change in the dependent variable; NPL is due to the independent variable that is OBC is weak as shown by R square of .072 at sig. value of .452. The result is consistent with the 'Impact of off-

balance sheet Activities on the Banks Risk and Revenue Growth' studied by Al-Tahat1 et el, (2016) in 13 Jordan commercial bank that concluded as 'no significant association between off balance sheet items and credit risk' and Mikati, (2012) that indicated use of credit substitutes OBC by banks is associated with less credit risk.

IV. ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.858	1	1.858	.624	.452[b]
	Residual	23.807	8	2.976		
	Total	25.666	9			

a. Dependent Variable: NPL

b. Predictors: (Constant), OBC

The model is also found not fit as p value 0.452 is >0.05. It is also justified by the primary data that 96 respondents (65.75%) indicated default rate on guarantee is above the maximum limit set for loans by NBE 5.0%.

V. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.981	.944		4.216	.003		
	OBCSUM	-2.475E-005	.000	-.269	-.790	.452	1.000	1.000

a. Dependent Variable: NPL

$$NPLr = 3.981-0.269OBC+ e$$

Depending on the results of above regression analysis, there is no correlation between the off-balance sheet activities and credit risks, as the value of the correlation coefficient (R = -0.269) and the coefficient of determination (Adjusted R^2 = 0.072) at the level of significance ($\alpha \leq 0.05$). The Table also indicates that there is no effect for the off-balance sheet activities on credit risks where Sig value = .452, β = -.269). Therefore the result failed to reject the null hypothesis of the study, which states that "There is no statistically significant effect between off-balance sheet commitments and credit risks of Ethiopian private commercial banks".

4.3.2 Impact of Off Balance sheet Commitments on Liquidity Risk

i. Descriptive Statistics

	Mean	Std. Deviation	N
Liquidity ratio	40.3590	16.24281	10
OBC	24618.1650	18362.26895	10

Source: NBE and own computation

As per the above table the mean liquidity ratio; in this case defined as the ratio of liquid asset to total deposits of al private banks' for the study period was 40.36% with standard deviation of 16.24% and mean OBC was Br. 24.618 billion. This means that the cash on hand and deposit with other local banks, foreign banks, and the NBE, covers on average 40.34% /with plus or minus of 16.24% /of the total customers' deposit. This indicator reflects the capacity Ethiopian private commercial banks' ability to pay their depositors. The ratio was by far higher that the NBE requirement of 15% liquidity asset as compared to their net current liabilities.

ii. Correlations

		LR	OBCSUM
Pearson Correlation	LR	1.000	-.761
	OBC	-.761	1.000
Sig. (1-tailed)	LR	.	.005
	OBC	.005	.
N	LR	10	10
	OBC	10	10

Source: NBE and own computation

Using the above correlation result, the study finding indicated that there is strong negative relationship between OBC and liquidity risk and yet significant (sig. value of 0.005).

iii. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.761[a]	.579	.527	11.17338	.579	11.019	1	8	.011

a. Predictors: (Constant), OBC

From the above table, the coefficient of determination; R- square also indicated the change in the dependent variable; Liquidity ratio is due to the independent variable that is OBC is

found high as shown by R square of 0.579 at sig. value of 0.011. This is due the fact that most guarantees are unconditional and the financial institutions immediately use their liquid asset to pay any claim from defaulted guarantees as indicated in Mikati, (2012) that banks engaged more in credit substitute OBC are less liquid.

IV. ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1375.704	1	1375.704	11.019	.011[b]
	Residual	998.755	8	124.844		
	Total	2374.459	9			

a. Dependent Variable: LR

b. Predictors: (Constant), OBC

The ANOVA table above also indicates as the model is fit with sig value of 0.011

V. Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	56.935	6.117		9.308	.000		
	OBC	-.001	.000	-.761	-3.320	.011	1.000	1.000

a. Dependent Variable: LR

$$Lr = 56.935 - 0.761OBC + e$$

Depending on the results of above regression analysis, there is high correlation between off-balance sheet commitments and liquidity risks, as the value of the correlation coefficient (R = -0.761) and the coefficient of determination (Adjusted R2 = 0.579) at the level of significance ($\alpha \leq 0.05$). So, a unit increase in OBC will automatically decrease liquidity ratio by 0.76. The Table also indicates that there is statistically significant impact of off-balance sheet commitments on the private bank's liquidity risks at Sig value = 0.011, β = -.761). Therefore, the result rejects the null hypothesis of the study, which states that "There is no statistically significant effect of off-balance sheet commitments on liquidity risks of Ethiopian private commercial banks". The finding is similar with Al-Tahat et el, (2016), Dainahw Maina, (2013) and Mikati, (2012).

4.3.3 Impact of Off Balance Sheet Commitments on Capital Adequacy

i. Descriptive Statistics

	Mean	Std. Deviation	N
Capital Adequacy Ratio (CAR)	19.8820	3.82588	10
OBC	24618.1650	18362.26895	10

Source: NBE and own computation

As can be seen in the above table the mean CAR and mean OBC of the industry (private banks) was 19.88% and Br. 24.618 billion during the study period with ±3.82% and Br. 18.36 billion standard deviation respectively. This indicates that the ratio is far higher than the NBE requirement of 8% and Basel requirement of again tier I and tier II capital of 10.5% and 12.0% respectively.

ii. Correlations

		CAR	OBC
Pearson Correlation	CAR	1.000	-.908
	OBC	-.908	1.000
Sig. (1-tailed)	CAR	.	.000
	OBC	.000	.
N	CAR	10	10
	OBC	10	10

Source: NBE and own computation

As can be seen from the table above, the degree of association or correlation between OBC and CAR is very strong and negative. This implies that any increase in one unit of OBC would automatically leads to a significant decrease in the CAR. The result is consistent with the one studied by Al-Tahat1 et el, (2016).

iii. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.908[a]	.824	.802	1.70068	.824	37.547	1	8	.000

a. Predictors: (Constant), OBC

As per the above table, OBC highly affects the bank's capital adequacy ratio; sig value is 0.000 or 100% degree of accuracy that the 82.4% explained variation in CAR is due to OBC.

iv. ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	108.598	1	108.598	37.547	.000[b]
	Residual	23.138	8	2.892		
	Total	131.737	9			

a. Dependent Variable: CAR

b. Predictors: (Constant), OBC

The above ANOVA table also indicates that, the goodness of fit of the model is maintained for p value of <= 0.05 at 0.000.

v. Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	24.539	.931		26.356	.000		
	OBC	.000	.000	-.908	-6.128	.000	1.000	1.000

a. Dependent Variable: CAR

$$CAR = 24.539 - 0.908OBC + e$$

From the above regression analysis, a unit increase in OBC, leads to a 0.908 unit decrease in the capital adequacy ratio. Regardless of the change, in the OBC, the amount of the capital adequacy ratio remains at 24.5%. Depending on the results of above regression analysis, there is high correlation between the off-balance sheet commitments and CAR, as the value of the correlation coefficient (R = -0.908) and the coefficient of determination (Adjusted R2 = 0.824) at the level of significance ($\alpha \leq 0.05$) . The Table also indicates that there is statistically significant effect of off-balance sheet commitments on CAR at Sig value = .0.000, β = -.908). Therefore, the result rejects the null hypothesis of the study, which states that "There is no statistically significant effect between off-balance sheet commitments and capital adequacy risk of Ethiopian private commercial banks".

4.3.4 Impact of Off- Balance sheet Commitments on Revenue

i. Descriptive Statistics

	Mean	Std. Deviation	N
REVENUE	17,900.8570	14,078.92158	10
OBC	24,618.1650	18,362.26895	10

Source: NBE and own computation

As can be seen in the above table the mean Revenue and mean OBC of the industry (private banks) was br. 17.9 billion and Br. 24.618 billion respectively during the study period. It is noted that the lowest value of revenue during the study period is (br. 4.385billion) and the largest value is (br. 46.945billion), while the arithmetic average was (br. 17.901 billion billion) and standard deviation was (14.078 billion). This reflects a disparity and a large difference in the size of Ethiopian private commercial banks' revenues.

ii. Correlations

		REVENUE	OBC
Pearson Correlation	REVENUE	1.000	.977
	OBC	.977	1.000
Sig. (1-tailed)	REVENUE	.	.000
	OBC	.000	.
N	REVENUE	10	10
	OBC	10	10

Source: NBE and own computation

As can be seen from the table above, the degree of association or correlation between OBC and revenue is very strong and positive. This implies that any increase in one unit of OBC would automatically leads to a significant increase in the total revenue. This is also justified by the survey data that that 106 respondents (72.6%) confirmed income, as their primary reason to engaged in OBC and the study made by Al-Tahat1 et el, (2016) too.

iii. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.977[a]	.955	.950	3156.89538	.955	171.003	1	8	.000

a. Predictors: (Constant), OBC

As per the above table, OBC highly affects the bank's revenue; sig value is 0.000 or 100% degree of accuracy that the 95.5% explained variation in revenue is due to OBC.

iv. ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1704216388.988	1	1704216388.988	171.003	.000[b]
	Residual	79727907.305	8	9965988.413		
	Total	1783944296.293	9			

a. Dependent Variable: REVENUE

b. Predictors: (Constant), OBC

The ANOVA table above indicates that, the goodness of fit of the model is maintained for p value of ,<= 0.05 at 0.000.

v. Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-548.042	1728.289		-.317	.759		
	OBC	.749	.057	.977	13.077	.000	1.000	1.000

Source: NBE and own computation

a. Dependent Variable: REVENUE

From the regression table, a unit increase in OBC, leads to a 0.977 unit increase in the revenue. Regardless of the change, in the OBC, the amount of revenue of the private banks remains -548.042million. Depending on the results of above regression analysis, there is high positive correlation between the off-balance sheet commitments and the private bank's revenue, as the value of the correlation coefficient (R = 0.977) and the coefficient of determination (Adjusted R2 = 0.955) at the level of significance 0.000 ($\alpha \leq 0.05$). The Table also indicates as there is statistically significant effect of off-balance sheet commitments on revenue where Sig. value = .0.000, β = 0.977). Therefore the result rejects the null hypothesis of the study, which states that "There is no statistically significant effect between off-balance sheet commitments and revenue of Ethiopian private commercial banks".

$$Rev = -548.042 + 0.977OBC + e$$

4.3.5 Impact of Off Balance Sheet Commitments on ROE

i. **Descriptive Statistics**

	Mean	Std. Deviation	N
ROE	24.629	2.6247	10
OBC	24,618.1650	18,362.26895	10

As can be seen in the above table the mean ROE and OBC of the industry (private banks) was 24.63% /with standard deviation of 2.6247/ and Br. 24.618 billion respectively during the study period. It is noted that the lowest value of ROE during the study period is (19.57%) and the largest value is (27.65%). This reflects as there was major disparity difference in the size of Ethiopian private commercial banks' ROE.

ii. **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.149[a]	0.0223	-0.0999	2.7528

a. Predictors: (Constant), OBC

iii. Correlations

		ROE	OBC
Pearson Correlation	ROE	1.000	-.149
	OBC	-.149	1.000
Sig. (1-tailed)	ROE	.	.340
	OBC	.340	.
N	ROE	10	10
	OBC	10	10

As per the above tables, the relationship between OBC and ROE is weak, negative and insignificant as justified by R value of -0.149.

iv. **ANOVA[a]**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.000	1	.000	.182	.681[b]
	Residual	.006	8	.001		
	Total	.006	9			

a. Dependent Variable: ROE

b. Predictors: (Constant), OBC

As per the above ANOVA table, the model is not fit with sig value of 0.681.

v. **Coefficients[a]**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.252	.015		16.691	.000
	OBC	-2.133E-007	.000	-.149	-.427	.681

a. Dependent Variable: ROE

As can be seen from the above tables, the degree of association or correlation between OBC and ROE is weak, negative and insignificant at sig value of 0.05 at 0.681. The result is similar with the one studied by Karim et el. (2014), Bora Aktana, Sok-Gee Chanb, Sasa Žikovićc, Pinar Evrim-Mandacid, (2013). Depending on the results of above regression analysis, there is negative slight correlation between the off-balance sheet commitments and the private bank's ROE, as the value of the correlation coefficient (R = -0.149) and the coefficient of determination (Adjusted R2 = 0.0223) at the level of significance 0.681 . The Table also indicates as there is no statistically significant effect of off-balance sheet commitments on ROE where Sig. value = .0.681, β = -0.149). Therefore, the result failed to rejects the null hypothesis of the study, which states that "There is no statistically significant effect between off-balance sheet commitments and ROE of Ethiopian private commercial banks". The result clearly indicated OBC does not have much impact on shareholders return or cost of OBC outweigh its return as reflected in test of ROE.

$$ROE = 0.252 - 0.149OBC + e$$

4.4 Guarantee Management Practice

This section presents analyses and interprets findings of the study results sought from the primary data. As set out in the research methodology, 205 questionnaire were distributed (expecting 195 would be collected) for staffs working in eleven different private banks who were targeted for this study to assess the quality of private bank's OBC management system. However, only 146 (71.2%) were properly filled in and returned, 28 were incomplete while the remaining 31 were not returned at all. Response rates was excellent and representative and conform to Mugenda and Mugenda (1999) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent.

4.4.1 Respondent Profile

4.4.1.1 Experience

Table 2: Respondents' Experience

Experience	Freq.	Percent	Cum.
5 to 10 years	82	56.16	56.16
11 to 15	27	18.49	74.66
16 to 20	17	11.64	86.30
1 to 4	13	8.9	95.21
>20	7	4.79	100.00
Total	146	100.00	

Source: Researcher's survey result from primary data in 2020

From the finding 82 respondents (56.2%) had 5 to 10 years of experience, 27 (18.5%) had 11 to 15 years of experience, 17 respondents (11.6%) had 16 to 20 years of experience , 13 respondents (9.0%) had less than 5 years of experience. Overall, from the finding about 91% of the respondents had more than five years of relevant experience which indicates the respondents are in good position to understand the subject matter and provide relevant input to the study.

4.4.1.2 Educational Level, Qualification and Position

Table 3: Respondents' Educational Background and Qualification

	Qualification					
Education	**Accounting**	**Economics**	**Management**	**Other**	**Total**	**Percentage**
BA	29	14	19	6	68	46.58
MA	17	24	32	4	77	52.74
Phd.	0	1	0	0	1	0.68
Total	46	39	51	10	146	100
Percentage	31.51	26.71	34.93	6.85	100.00	

Source: Researcher's survey result from primary data in 2020

From the Analysis 77 Respondents (52.7%) had second degree 68 (46.6%) had first degree and one respondent (0.7%) had more than second degree. Looking at their qualification, 51 (34.9%) graduated in Management, 46 (31.5%) graduated in Accounting, 39(26.7%) graduated in Economics, and the rest 10 (7%) were from various disciplines like Law. From the result, respondents are well educated and had relevant diversified qualifications that help them better analyse the question and give appropriate feedback.

4: Respondents' Position and Department

	Department						
Position	**Audit**	**Branch**	**Credit**	**Legal**	**Risk**	**Total**	**Percent**
Auditor	28	0	0	0	0	28	19.18
Director	0	0	1	1	1	3	2.05
Engineer	0	0	1	0	0	1	0.68
L. Officer	0	2	39	0	0	41	28.08
Manager	10	11	5	3	8	37	25.34
Other	3	0	1	5	0	9	6.16
Risk Officer	0	0	1	0	26	27	18.49
Total	41	13	48	9	35	146	100.00
Percent	28.08	8.90	32.88	6.16	23.97	100.00	

Source: Researcher's survey result from primary data in 2020

Looking at respondents' Department, 48 respondents (32.9%) were from Credit department, 41 (28.1%) from Audit, 35 (24.0%) from Risk Department, 13 (8.9%) from Branches and the remaining 9 (6.1%) were from Legal Service. All in all, among the total respondent 40 respondents (27.4%) hold managerial position, while the remaining 106 (72.6%) were professional staffs (officers) working in various departments. From the result, respondents profile is well disbursed in each relevant business functions in the bank associated with the subject matter.

4.4.2 Off-balance Sheet Commitment Management Practice

4.4.2.1 Risk Understanding & Management

Table 5: Risk Understanding and Assessment

No.	Variables	Obser.	Mean	Std. dev.	Min	Max
1	Managing guarantee risk is important to the bank's	146	4.6027	0.7920	1	5
2	Existence of separate guarantee management policy is crucial	146	4.0411	1.0095	1	5
3	There is significant BOD and senior management involvement in guarantee risk management in your bank	146	3.5069	0.9191	1	5
4	There is a common understanding of guarantee risk management across the bank	146	3.0616	0.8487	1	5
5	Responsibility for guarantee risk management is understood throughout the bank	146	3.1849	0.8305	2	5
6	Accountability for guarantee risk management is understood throughout the bank	146	3.2260	0.8927	1	5
	Mean of Means	**146**	**3.6039**	**0.5707**	**2.3**	**5**

Source: Researcher's survey result from primary data in 2020

The study sought to assess how inherent risk of guarantee is understood in the industry. Accordingly, the respondents strongly agreed that (mean of 4.60 and Standard deviation of 0.79) managing guarantee risk is an important to the bank's performance and the need to establish separate guarantee appraisal and follow up function as it is crucial to the bank (with mean of 4.04 and standard deviation of 1.0). However, the result showed the respondents are uncertain as there is common understanding about guarantee risk management across the bank (mean of 3.06 and standard deviation of 0.85), appropriate board oversight, (mean of 3.51 and standard deviation of 0.92) and responsibility and

accountability for guarantee risk management is clearly understood throughout the bank (mean of 3.06 and 3.18 respectively).

From the analysis we come to understand that there is strong understanding that guarantee products involves high risk and commensurate risk management system and internal control is needed but the fact on the ground, i.e the existing practice is not commensurate with the inherent risk that the product bears.

Table 6: Major Cause for Default in Guarantee

No.	Risk Factors	Frequency	Percent
1	Poor KYC	69	47.26
2	Poor Collateral	23	15.75
3	Employee Integrity	16	10.96
4	Unfair Completion	11	7.53
5	Lack of Awareness	9	6.16
6	Poor Monitoring by Management	9	6.16
7	Poor Internal Control System	5	3.42
8	Customer Integrity	4	2.74
	Total Observation	146	100

Source: Researcher's survey result from primary data in 2020

The Study also sought to identify the major factors that increase risk from guarantee products. Based on the mode result, out of the total 146 respondents, 69 (47.3%) indicated poor KYC practice is the major risk factor for guarantee to default followed by poor collateral; 23 (15.6%) indicated poor collateral is the single major factors, while 16 (11.0%) agreed poor employee integrity is the major cause for guarantee to default. On the other hand, 11 respondents claimed unfair competition still the first cause for most guarantee to fail while 9 (6.2%) pointed on lack of awareness and poor monitoring by management (for each), 5 (3.4%) claimed for poor internal control system and 4 (2.7%) agreed poor customer integrity make them to wilfully default. To summarize poor KYC, poor collateral and problem with employee's integrity are among the top three highly rated causes for most guarantees to fail.

Table 7: Reason for issuing guarantee

No.	Reasons	Frequency	Percent
1	Income	106	72.60
2	Competition	29	19.86
3	Avoid NBE Bill	10	6.85
4	Less Disclosure requirement by NBE	1	0.68
	Total	146	100.00

Source: Researcher's survey result from primary data in 2020

Similarly, the study also endeavoured to identify the major reason that the financial institutions engaged in guarantee commitment. Based on the response, 106 respondents (72.6%) confirmed, they involve in guarantee to support their income, while 29 (19.8%) claimed increase in competition for deposit to give as much loans as possible, 10 (6.8%) indicated they use guarantee as a means to avoid NBE bill purchase requirement unlike loans and 1(0.7%) respondent pinpointed on less disclosure requirement by NBE. To summarize, Income, increase in competition for deposit, and NBE bill avoidance are the top three most rated reasons for increase in guarantee commitment in the industry.

4.4.2.2 Guarantee Processing and Appraisal

Table 8: Guarantee Processing and Appraisal

No.	Questions	Strongly Agree		Agree		Uncertain		Disagree		Strongly Disagree	
		Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
1	The bank demands a business plan from all clients to identify risk exposure from guarantee	5	3.40%	52	35.6%	36	24.7%	40	27.4%	13	8.9%
2	The bank looks at relevant experience of the guarantee applicant	26	17.8%	88	60.3%	19	13.0%	11	7.5%	2	1.4%
3	The bank carries out guarantee monitoring activities independent of the appraisal function	10	6.8%	53	36.3%	45	30.8%	35	24.0%	3	2.0%
4	The bank's guarantee approval process establish accountability to decision makers	0	0%	88	60.3%	30	20.6%	2	8.9%	15	10.3%
5	There are times the guarantee appraisal of applicant's can be influenced by directors, senior managers or influential staff of the bank	20	13.7%	49	33.7%	57	39.0%	17	11.6%	3	2.1%

6	The bank looks at collateral whenever granting any guarantee facility	18	12.3%	51	34.9%	32	21.9%	44	30.1%	1	68.0%
7	The bank considers the past repayment track record of applicants for guarantee facility	22	15.1%	92	63.0%	16	11.0%	11	7.53%	5	3.4%
8	The guarantee analysis and appraisal procedure followed by the bank in issuing guarantee is excellent	8	5.5%	60	41.1%	42	28.8%	33	22.6%	3	2.0%

Source: Researcher's survey result from primary data in 2020

The study sought to establish respondent agreement level towards effectiveness of guarantee processing and appraisal level in their bank. As per the response, only 5 (3.4%) respondents strongly agreed that the bank demand business plan to issue guarantee while 13 (8.9%) strongly disagreed on the point. All in all, 99 respondents (63.7%) were unsure or disagreed with the idea that the bank demand business plan to grant guarantee. Looking at the average from the study findings, the respondents expressed their disagreement that financial institution demands business plan as shown by mean of 3.03 with standard deviation of 1.06 (Table 9). The result indicated adequate customer appraisal is not done by the time guarantee facility is approved

Regarding independent guarantee appraisal and monitoring Activities only 43.2% (63 respondents) reacted positively as that there is independent guarantee appraisal and monitoring function of which 10(6.85%) strongly agreed on the issue. On the other hand, 3 respondents (2.0%) strongly disagreed while 35 (24.0%) disagreed on the issue. Mean Respondent agreement level on the existence of independent appraisal and monitoring function in the industry is found unsatisfactory with mean of 3.22 with standard deviation of 0.96. The result indicated as the banks do not have separate guarantee approval and monitoring function that may create conflict of interest.

Regarding the question that requires respondent agreement level towards senior management involvement or influence on the approval decision, 3 (2.05%) strongly disagreed on the issue, 17 (11.64%) indicated as they disagree on senior management

influence in the approval decision, 49 (35.6%) agreed on the issue, 57 (39.04%) were uncertain while 20 (13.7%) strongly agreed as there is senior management influence on the decision process. All in all, the finding uncovered 69 (47.3%) respondent believe as there is senior management influence on the approval decision. Overall, Respondents indicated senior management influences the guarantee approval decision to some extent as shown by mean of 3.45 and standard deviation of 0.94. From the finding, I come to understand that the approval decision is not transparent and lacks clear set of criteria as decisions can be influenced by senior management than the approval committee.

Regarding Collateral, only 1 respondent (0.7%) strongly disagreed that the bank demand collateral to grant guarantee, and 44 respondents (30.1%) dis agreed on the issue. On the contrary 18 respondents (12.3%) strongly agreed and 51 (34.9%) agreed that collateral is a must. Those who are in the middle or uncertain were about 32(21.9%). Respondent indicated their disagreement with the bank's position to require collateral as shown by the mean 3.28 and standard deviation of 1. This indicates the banks' neither use cash flow method (do not require business plan as shown in question 1 above for business plan) or collateral based commitment undertaking to ensure its fall-back position acceptable.

78 respondents (53.4%) were unsure or disagreed with the question that they have effective guarantee appraisal system while 46.6% (68) respondents had positive response as to their guarantee appraisal system.

Table: 9 Summary of Mean Value and Mean of Means (Guarantee Processing and Appraisal)

No.	Question	Observation	Mean	Std. Dev.	Min.	Max.
1	The bank demands a business plan from all clients to identify risk exposure from guarantee commitments	146	3.0274	1.0631	1	5
2	The bank looks at relevant experience of the guarantee applicant	146	3.8562	0.8468	1	5
3	The bank carries out guarantee monitoring activities independent of the appraisal function	146	3.2192	0.9574	1	5
4	The bank's guarantee approval process establish accountability to decision makers	146	3.7192	0.7678	2	5

5	There are times the guarantee appraisal of applicant's can be influenced by directors, senior managers or influential staff of the bank	146	3.4520	0.9401	1	5
6	The bank looks at collateral whenever granting any guarantee facility	146	3.2808	1.0488	1	5
7	The bank considers the past repayment track record of applicants for guarantee facility	146	3.7877	0.9113	1	5
8	The guarantee analysis and appraisal procedure followed by the bank in issuing guarantee is excellent	146	3.2466	0.9582	0	5
	Mean of Means	**146**	**3.3321**	**0.4924**	**2.125**	**5**

Source: Researcher's survey result from primary data in 2020

Respondents expressed their judgement regarding effectiveness of the guarantee appraisal and processing system unsatisfactory as shown by mean of 3.25 with standard deviation of 0.96. This indicates that the guarantee appraisal system of the private banking industry is not robots and highly exposed to risk of default.

All in all, from the study finding the respondents indicated that guarantee appraisal and processing process is unsatisfactory as shown by mean average of all the respondent 3.33 and standard deviation of 0.49.

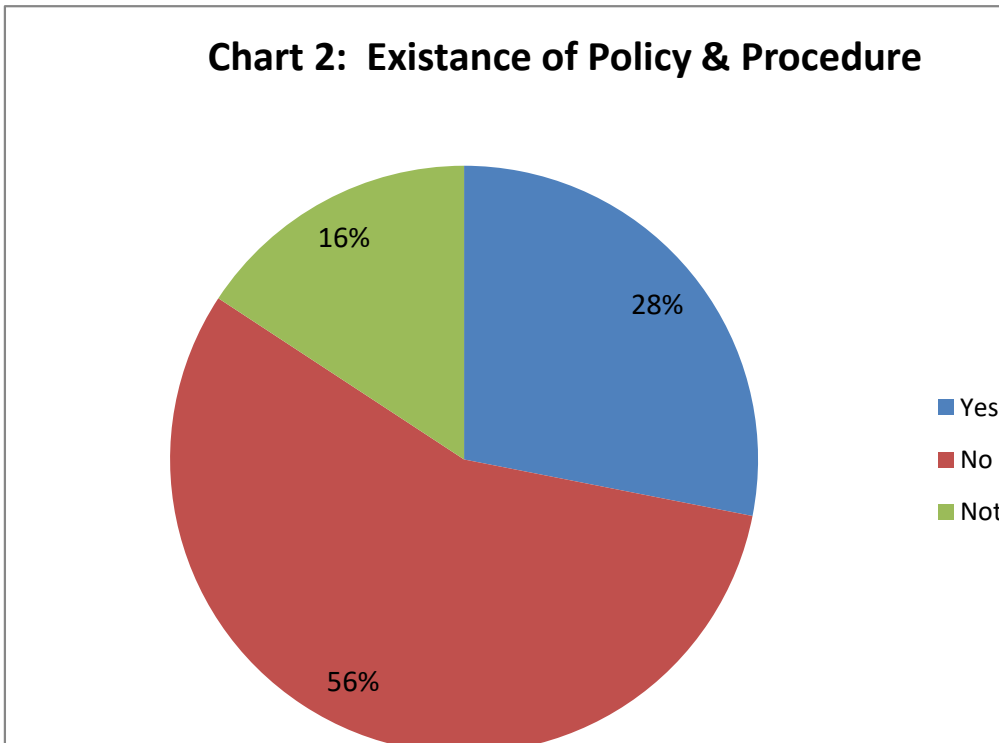
Table: 10 Number of Days to approve Guarantee Requests

Number of Days	Frequency	%
<3days	30	20.55
3 to 5 day	54	36.99
5 to 10 days	41	28.08
>10 Days	21	14.38

Source: Researcher's survey result from primary data in 2020

Moreover, the study is also tried to see average number of days a guarantee approval process takes. As per the finding 54 respondents (37.0%) responded as the approval process took 3 to 5 days, 41 (28.1%) indicated as it would take 5 to 10 days, 30 (20.6%), agreed as the approval process would be finalized in 3 days while the remaining 21 responded as it would take more than 10 days to process. Overall, 84 respondents (65.1%) indicated the approval process took maximum of merely 5 day pointing the presence of rushes in the appraisal process for various factors as explained by the rationale to issue guarantee earlier.

4.5.2.3 Policies and Procedures



Source: Researcher's survey result from primary data in 2020

The study also sought how the bank implements guarantee approval and administration activities and asked respondents' whether the bank had formal written guarantee policy and procedure. From the finding, 41 respondents (28.1%), indicated that their bank had a formal separate guarantee appraisal and administration policy while 23 (15.8%) indicated as they are unsure whether their financial institution had separate policy and procedure though they were expected to know considering their work station; indicating poor communication and 82 (56.2%) ensured as their bank does not have separate guarantee appraisal and administration policy. This implies the industry does not have standard separate guarantee appraisal and administration policy and procedure, lacks consistent practice, poor board oversight, absence of clearly set roles and responsibilities of each organ in the bank to manage OB risk.

Table 11: Effectiveness of Policy

	Agreement level					
	1	2	3	4	5	Total
Set Portfolio Limit	12	0	9	0	20	41
Comply the policy	0	13	10	14	4	41

Source: Researcher's survey result from primary data in 2020

Again, fom those respondents indicated as their bank had separate guarantee administration policy (41), only 18 (43.9%) indicated the bank comply with its written policy and procedure. The rest 23 (56.1%) disagree or not sure whether the bank complied with its written policy and procedure. Similarly, from the total 41 respondents indicate as they have policy and procedures, only 20 (48.8%) indicated they have portfolio limit among various types of guarantees. The remaining 21(51.2%) confirmed as they didn't set the limit or they are unsure whether the bank had internal limit or not. From the respondents response, even those confirmed as they have the policy, indicated the policy lacks appropriate portfolio limit and problem in adhering with it.

4.4.2.4 Monitoring and Control

Table: 12 Monitoring and Control

S/N.	Questions	Strongly Agree		Agree		Uncertain		Disagree		Strongly Disagree	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
1	Collateral estimation is regularly assessed	10	6.8	67	45.9	33	22.6	35	24.0	1	0.7
2	Collateral is a must before one is granted guarantee?	17	11.6	50	34.2	19	13.0	52	35.6	8	5.5
3	Collaterals for guarantee are usually in the form of immovable properties	6	4.1	53	36.3	16	11.0	60	41.1	11	7.5
4	The bank/branch do pre audit before guarantee commitment has been taken	2	1.4	40	27.4	46	31.5	52	35.6	6	4.1
5	The bank/branch implement the condition & sanction set by different appraisal organs	3	2.1	82	56.2	38	26.0	23	15.8	0	0
6	The bank periodically prepare contingent liability (guarantee) reports for signaling loss in any portfolio	6	4.1	68	46.6	56	38.4	16	11.0	0	0.0

7	Guarantee risk report is periodically reported to the Board	6	4.1	56	38.4	64	43.8	20	13.7	0	0.0
8	The guarantee portfolio is distributed among customers engaged in different sectors of the economy (DTS, import, export, construction, etc)	10	6.8	51	34.9	42	28.8	40	27.4	3	2.1
9	The bank guarantee concentrate in particular sectors of the economy	5	3.4	78	53.4	39	26.7	23	15.8	1	0.7
10	The bank has pre-set guarantee concentration limits in every sector	7	4.8	36	24.7	50	34.2	50	34.2	3	2.1
11	The Bank has pre-set guarantee concentration limits by type of guarantee. (bid bond, performance, advance, suppliers, etc)	8	5.5	45	30.8	44	30.1	44	30.1	5	3.4

Source: Researcher's survey result from primary data in 2020

The study endeavoured to assess how the private banking monitor and control their guarantee exposures. Based on that, the result indicated 77 (52.7%) respondents agreed or strongly agreed that collateral estimation done regularly while 69 (47.3%) disagree or uncertain about the issue. Likewise, only below average respondents 67 (45.9%) agree or strongly agree collateral is a must to issue guarantee. The Majority 60 (41.1%) disagreed or strongly disagree on the statement while 19(13%) were uncertain. In this connection 71(48.6%) disagreed of which 11 strongly disagreed that collateral is in the form of immovable properties only 59 (40%) agree on the issue.

To Summarize, the study sought to assesses, how the private banking sector monitors and control their guarantee exposure. Accordingly, respondents expressed their disagreement with mean of less than 3.0 for question stating the bank perform pre audit before issuing guarantee, collateral is usually in the form of immovable property and the bank has pre-set

guarantee concentration limit across various guarantee product. And they also indicated their low agreement level with mean of 3.43 for the statement stating the bank periodically prepares contingent liability report.

Table 13: Mean value of Monitoring and Controls

S/N	Questions	Observation	Mean	St. dev.	Min.	Max.
1	Collateral estimation is regularly assessed	146	3.3425	0.9428	1	5
2	Collateral is a must before one is granted guarantee?	146	3.1096	0.1752	1	5
3	Collaterals for guarantee are usually in the form of immovable properties (building)	146	2.8836	1.1111	1	5
4	The bank/branch do pre audit before guarantee commitment has been taken	146	2.8630	0.9149	1	5
5	The bank/branch implement the condition & sanction set by different appraisal organs	146	3.4452	0.7793	2	5
6	The bank periodically prepare contingent liability (guarantee) reports for signaling loss in any portfolio	146	3.4383	0.7425	2	5
7	Guarantee risk report is periodically reported to the Board	146	3.3288	0.7621	2	5
8	The guarantee portfolio is distributed among customers engaged in different sectors of the economy (DTS, import, export, construction, etc)	146	3.1712	0.9781	1	5
9	The bank guarantee concentrate in particular sectors of the economy	146	3.4315	0.8213	1	5
10	The bank has pre-set guarantee concentration limits in every sector	146	2.9589	0.9312	1	5

11	The Bank has pre-set guarantee concentration limits by type of guarantee. (bid bond, performance, advance, suppliers, etc)	146	3.0479	0.98493	1	5
	Mean of Men's	**146**	**3.1837**	**0.5220**	**1.8181**	**4.3636**

Source: Researcher's survey result from primary data

Table 14: Default rate on guarantee

NPL Rate	Frequency	Percent
<5%	50	34.25
5 %to 10%	35	23.97
10% to 15%	20	13.70
15% to 20%	20	13.70
>20%	21	14.38
Observation	146	100.00

Source: Researcher's survey result from primary data in 2020

Overall, the study result indicated monitoring and control activities of the industry is not satisfactory as indicated by average mean of 3.18 and standard deviation of 0.52.

The Study is also sought to assess the guarantee default rate in the industry. Accordingly, the result indicated 50 (32.2%) indicated default rate of guarantee is below 5% while 35 (24.0%) indicated it as default rate would reach from 5% to 10 %, 40 (27.4%) indicated the default rate would tall from 10% to 15% while the remaining 21 (14.4%) indicated the default rate would surge more than 20.0%.

Overall, the result indicated about 96 respondents (65.75%) agreed that default rate is high; more than 5.0%; which is the maximum default rate permitted by NBE for loans.

Table 15: Collateral Coverage Rate

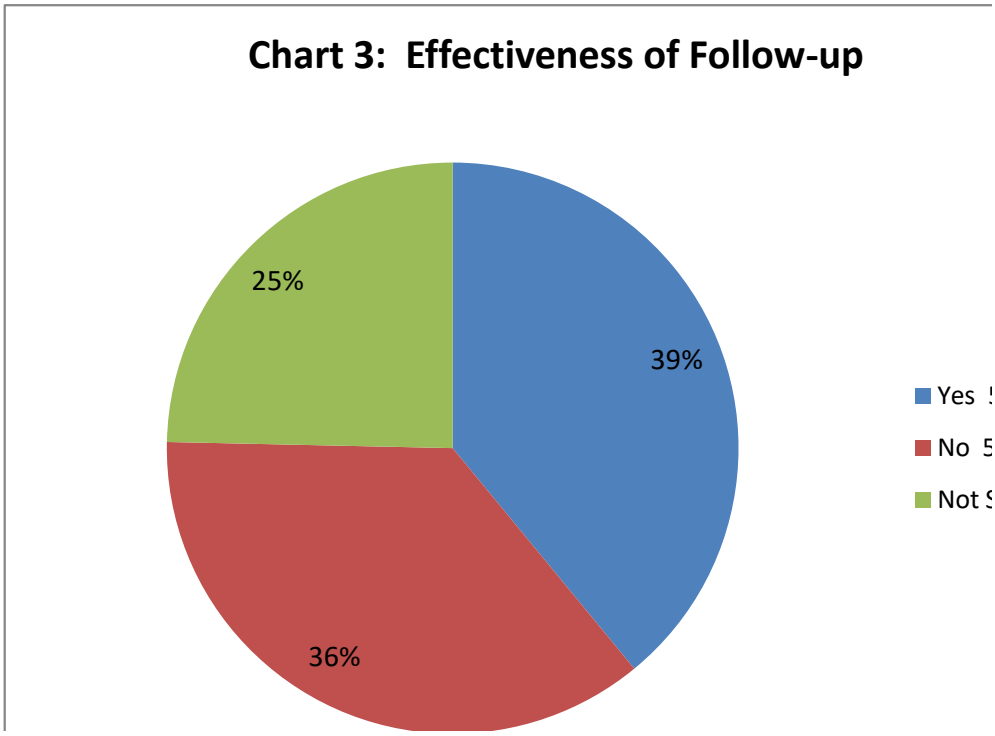
Collateral coverage rate	Frequency	Percent
<25%	19	13.01
25 %to 50%	19	13.01
50% to 75%	47	32.19
75% to 100%	50	34.25
>100%	11	7.53
Observation	146	100.00

Source: Researcher's survey result from primary data in 2020

The study is also sought to assess the industry practice with regards to the collateral coverage, as per the result, only 11 (7.5%) respondents responded that their bank requests

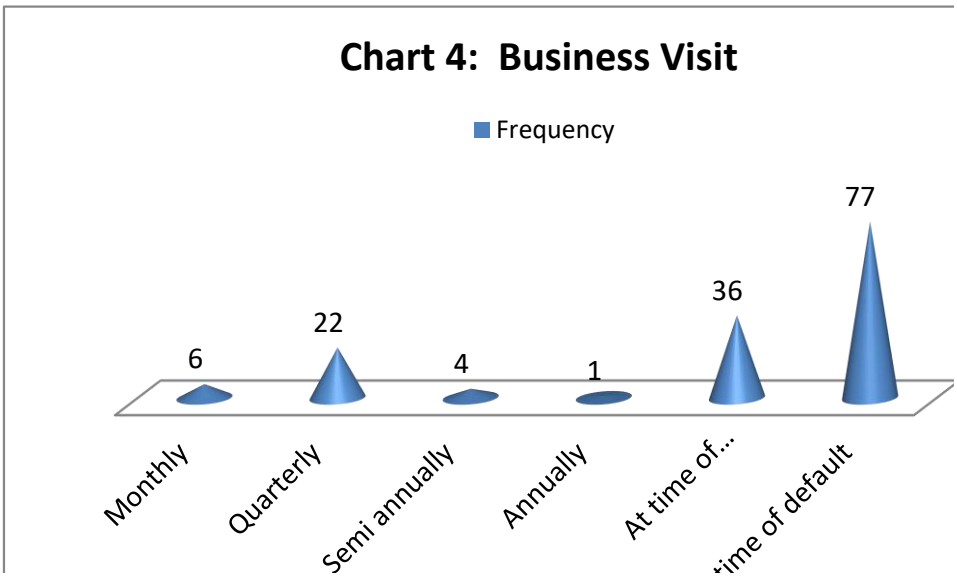
collateral that cover the guarantee request to the level 100% or more. 19 respondent (13.0%) indicated collateral is not mandatory and it only covers less than 25%. 66 respondents (45.2%) indicated collateral covers 25% to 75% and the rest 50 respondent (34.25%) indicated collateral is below 100% but above 75%. All in all, 85 respondents (58.2%) confirmed collateral coverage ranges from clean guarantee (0.00%) to 75%; this indicates the fate of the contingent liability is highly depends on the customer willingness to perform as per the contract.

4.4.2.5 follow-up



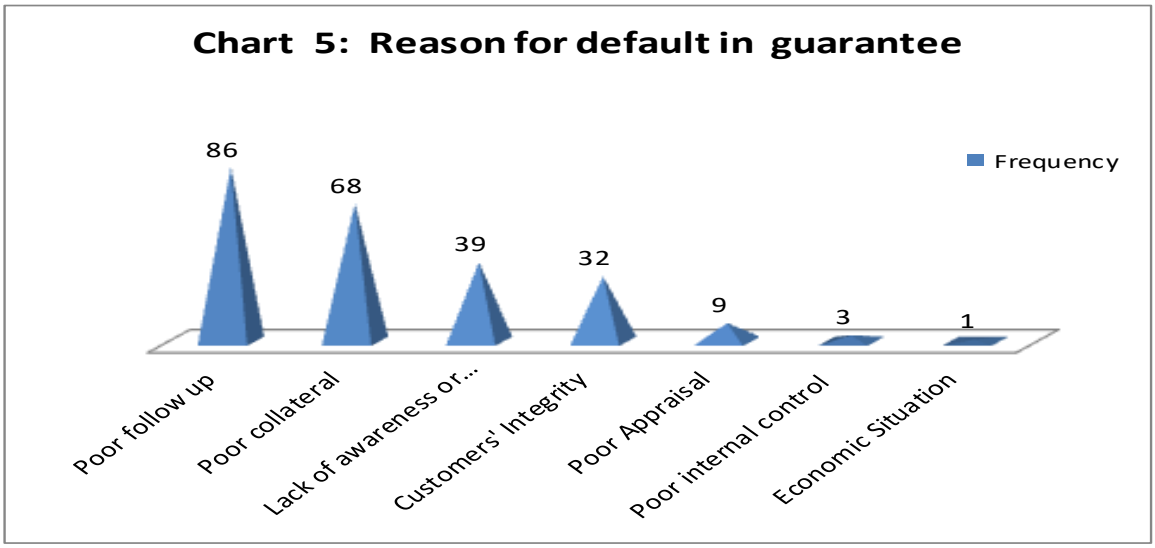
Source: Researcher's survey result from primary data in 2020

The study is also sought to assess the effectiveness of the industry's guarantee follow-up system. Based on that 57 (39.0%) respondents indicated that they have effective guarantee administration system, 36 (24.7%) indicated their guarantee administration system is not acceptable or ineffective while considerable number 53 (36.3%) indicated they are not sure about the issue. So, based on the finding about 89 respondents (60.9%) indicated as they are not sure or do not agree in the effectiveness of their bank's guarantee administration system which indicates that the system needs improvement.



Source: Researcher's survey result from primary data

In this connection, the study also sought to assess the industry practice in visiting their customers' business as part of the follow up procedure. Accordingly, considerable number of respondents indicated (77, 52.7%), business visit is conducted by the time the guarantee gets default, 36 (24.7%) indicated visit is conducted at the time of extension, and only 33 respondents (22.6%) indicated visit is conducted from monthly frequent visit to once per year. Hence from the finding, the result indicated 113 respondents (77.4%) indicated business visit is conducted by the time the credit worthiness of the customer gets deteriorated and the status of the project for which commitment undertaken is weak.



Source: Researcher's survey result from primary data in 2020

The study was also sought to identify the major reasons why guarantee facility gets default. From the finding, 146 respondents indicated about 238 major cause for guarantee to default of which 86 (35.7%) indicated lack of follow up which is justified by frequency of business visit above, followed by 68 (28.2%) Poor collateral, 39 (16.2%) lack of awareness or capacity to appraise customers, 32 (13.2%) claimed customers integrity problem /wilful default/, 9 indicated poor appraisal 3 claimed poor internal control and one pinpointed the current economic situation.

Table 16: Measures to recover claimed guarantees

	Freq.	%		Freq	%
Guarantee Extension	96	65.75	**Court Proceeding**	6	4.14
Convert to Receivables	34	23.29	**Foreclosure**	19	13.10
Searching for attachable properties	12	8.22	**Negotiation**	120	82.76
Convert to loan	4	2.74			
Observation	**146**	**100.00**	**Observation**	**146**	**100.00**

Source: Researcher's survey result from primary data in 2020

The study also tried to assess measure taken by the bank when guarantee gets default. As per the finding, from 146 respondents 96 (65.8%) indicated as the bank preferred to extend the guarantee, then 34 (23.29%) indicated as they convert it to receivables, 12 (8.2%) indicated as they search for attachable properties to recover; indicating poor collateral coverage before issuance, and 4 (2.7%) pointed as they will convert to loans.

Similarly, 121 respondent (82.9%) indicated that they prefer negotiation with the customer first, 19 (13.0%) indicated they prefer to foreclose collateral first while 6 (4.1%) indicated court proceeding as their first choice. From the finding, it is clear that the banks do not have the upper hand and prefer to extend or negotiate with the customer to get its money back

Table 17: Effectiveness of Law enforcement mechanism

	Frequency	Precent
Effective	92	62.6%
Not Effective	55	37.4%

Source: Researcher's survey result from primary data in 2020

Regarding effectiveness of court proceeding and foreclosure process, 92 respondents (62.6%), indicated court procedure is effective while 55 (37.4%) indicated law enforcement is infectiveness for various reasons like exaggerated collateral estimation

initially; reflection of employees integrity and difficult to get properties in case of movable properties which is a reflection of problem in the customers' integrity.

4.4.2.6 Roles and Responsibilities of the Central Bank

The study also sought to assess the industry's view on how the central bank discharges its role and responsibilities in ensuring the safety and soundness of private banks' in relation to guarantee products. Respondent's response in the issue is tabulated below.

Table:18 Roles and Responsibilities of NBE

S.N		Strongly Agree		Agree		Uncertain		Disagree		Strongly Disagree	
		Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
1	NBE plays significant role in ensuring the safety and soundness of the banking industry in connection with guarantee	9	6.2	67	45.9	34	23.3	32	21.9	4	2.7
2	NBE issues a directive requiring approval or administration of guarantee	5	3.4	61	41.8	47	32.2	26	17.8	7	4.8
3	NBE put in place sufficient reporting requirement with regards to guarantee portfolio	2	1.4	58	39.7	47	32.2	32	21.9	7	4.8
4	NBE put disclosure requirement or report on defaulted guarantee	2	1.4	56	38.4	55	37.7	29	19.9	4	2.7
5	NBE set criteria to classify guarantees based on their risk category	2	1.4	45	30.8	58	39.7	35	24.0	6	4.1
6	NBE set requirement to set reserve for defaulted guarantees	7	4.8	45	30.8	55	37.7	31	21.2	8	5.5
7	NBE give emphasis on outstanding guarantees issued to customers during their on-site examination	4	2.7	48	32.9	58	39.7	27	18.5	9	6.2
8	NBE updates banks on the current macro-economic indicators in relation to guarantee	4	2.7	32	21.9	62	42.5	38	26.0	10	6.8

9	NBE provides guarantee defaulter list to protect banks facing similar problem	5	3.4	33	22.6	55	37.7	35	24.0	18	12.3

Source: Researcher's survey result from primary data in 2020

As indicated above, 76 respondents (52.1%) indicated as the central bank plays significant role in ensuring the safety and soundness of the financial institution from guarantee products while 70 respondents (47.9%) disagreed or uncertain on the issue.

Regarding the central bank role in issuing commensurate guarantee management directives, 66(45.2%) respondent agreed on the issue while considerable numbers 80(48.6%) disagreed or unsure about the issue. From the result much is expected by the private bank from the regulator to ensure standard guarantee management regulation in the industry and reduce inherent risk from the product.

The study finding also indicated the NBE weakness in monitoring the private banks by regular reporting mechanism. As per the response 60 respondents (41.4%) agreed that NBE put in place sufficient reporting requirement while 86 (58.9%) disagreed or uncertain requires standard reporting requirement. Similarly, regarding disclosure requirement in defaulted guarantee, 58% (39.7%) agreed on the issue while 88 (60.3%) disagreed or uncertain of which 6 (4.1%) strongly disagreed.

Looking at respondents response on NBE role to set criteria to classify guarantees based on their risk level only 47(32.2%) agreed on the issue while the remaining 99 (67.8%) either disagreed or uncertain. Likewise, respondent expressed their agreement level with the role of NBE to protect depositors fund by setting reserve requirement for possible default on guarantee. Accordingly, 52(35.6%) agreed on the issue while the remaining 94(64.4%) either disagreed or not certain on NBE's effectiveness to protect depositors money of which 8 (5.5%) strongly disagreed on the issue. Regarding NEB's onsite examination, 94 (64.4%) respondents indicated NBE weakness in reviewing guarantee facility during their onsite examination by disagreeing or keeping uncertain. Regarding providing financial institution updated current information on macro-economic indicators and defaulter list 110 respondents (75.3%) disagree or uncertain that NBE provide current and updated information of which 10 (6.8%) strongly disagree and 108 respondents (74.0%) disagreed or unsure with NBE role to provide defaulter list on guarantee of which 18 strongly disagreed on the issue.

Table 19: Expected Values and Mean of Means

NBE Role	Observation	Mean	Std. Dev.	Min	Max
Safety & Soundness	146	3.308219	0.972484	1	5
Regulations	146	3.212329	0.941085	1	5
Reporting Requirement	146	3.109589	0.925674	1	5
Disclosure Requirement	146	3.157534	0.852488	1	5
Risk grading	146	3.013699	0.878763	1	5
Reserve Requirement	146	3.082192	0.96495	1	5
Cover during onsite examination	146	3.075342	0.932816	1	5
Providing macroeconomic indicators	146	2.876712	0.923938	1	5
Providing Defaulter list	146	2.808219	1.032674	1	5
Mean of overall means	146	3.0715	0.6673	1	4.6667

Source: Researcher's survey result from primary data in 2020

All in all, the average mean respondents result indicated the central bank is not active or doing unsatisfactory in ensuring the safety and soundness of banks from guarantee product as shown by mean of 3.07 and standard deviation of 0.667 with minimum value 1 and maximum value of 4.667.

The result indicated much is expected from the NBE to play its monitoring role in ensuring the safety and soundness of financial institution from such products. As per the average mean result respondents indicated their disagreement to the questions evaluating NBE role in ensuring the safety and soundness of financial institutions, sufficient reporting requirement, disclosure requirement, Guarantee risk classification, provisioning , on-site examination, updating on current macroeconomic indicators, providing guarantee defaulter by giving a rate ranging from 2.8 to 3.3.

4.4.3 Overall Assessment

Table 20: Summary of mean values (guarantee management system)

S.N	Variable	Mean	Std. Dev.	Min	Max
1	Risk Understanding (mean of means)	3.6039	0.5307	2.3333	5
2	Guarantee Processing and Appraisal (mean of means)	3.4486	0.5118	2.1250	5
3	Policy and procedures (mean of means)	2.4219	1.3275	0	5
4	Monitoring and follow up(mean of means)	3.1837	0.5220	1.8182	4.3636
5	Responsibility of NBE (mean of means)	3.0715	0.6673	1	4.6667
	Average mean of means (from 1 to 4 above)	3.1645	0.5328	1.9663	4.3784

Source: Researcher's survey result from primary data in 2020

As per the table above, respondents indicated their disagreement (mean of 2.42) for the questions evaluating their banks for establishing effective guarantee management policy and procedure. Similarly, they expressed their dissatisfaction in their banks guarantee processing & approval and monitoring & control practice as shown by mean of 3.45 and 3.18 respectively. However, the result indicated respondents have better risk understanding and awareness on the subject matter and establishing sound guarantee management system is crucial for the bank's profitability and existence as shown by average mean of 3.60. Overall, assessment of private banks off-balance sheet commitment management practice is found unsatisfactory as shown by average mean of all respondents 3.16 and standard deviation of 0.53.

Besides, respondents rate their disagreement with the central bank role in ensuring the safety and soundness of the financial system from associated risk of OBC by rating 3.07 with standard deviation of 0.66. The result indicates much is expected from the central bank to ensure commensurate directives to address the growing concern from risk of OBC.

CHAPTER FIVE
5. SUMMARY, CONCLUSSION & RECOMMENDATION

5.1 Introduction

This chapter summarizes the major findings of the study and provides conclusion and recommendations on weaknesses identified on the existing OBC management practice of Ethiopian private commercial banks and impact of OBC on the banks' performance.

5.2 Summary

5.2.1 Impact of OBC on Risk and Return

The study finding indicated using off-balance sheet items as a means of increasing revenue has been increasing from time to time. During the study period off-balance sheet commitments of Ethiopian private commercial banks has increased by 919.5% unlike their total asset and capital that has shown an increment of 799.8% and 843.4% respectively. Especially guarantee commitments has shown an increment of 2,403.4% during the past ten years to June 2019; and 221.0% for the past five years to June 2019; indicating the increase trend in using off balance sheet commitments as a means of increasing income like the studies conducted by Uzoma et el, (2007) and Al-Tahat1 et el,(2016). According to Al-tahtel et el, (2016), off-balance sheet commitments becomes important element and their balance is increasing from time to time nearly by 24.46% for the study period which was 5 years to end 2014. However, the study result is completely different from the one studied by Tamrat, (2013).

The study finding indicated the relation between credit risk and OBC is weak, negative (-0.269) and yet insignificant as expressed by Sig. value of 0.226. This may be due to the fact that default in guarantee may not be converted to loan and may be held as collection from customer /Accounts receivable/ as justified by the primary data to avoid increase in NPLs, and subsequent provision. The study finding also indicated that OBC have significant negative relationship with liquidity risk and capital adequacy as expressed by R-value -0.761 and -0.908 and Sig. value of 0.011 and 0.000 respectively.

The Study finding also exhibited, OBC have significant positive relationship with Revenue as expressed by R- value 0.977 and Sig. value of 0.000. However, OBC have negative

insignificant relationship with ROE as expressed by R value -0.149 and sig value of 0.681. This clearly indicates the risk that the banks are exposed to outweigh the return sough from product.

Therefore, the study result rejects the null hypothesis that states OBC do not have significant impact on liquidity risk, capital adequacy risk and revenue growth but failed to reject the null hypothesis that states OBC do not have significant impact on credit risk and ROE.

The result is consistent (for credit , liquidity, capital adequacy and revenue test) with the one studied by by Al-Tahat1 et el, 2016 on thirteen Jordan commercial banks, Bora et el., (2013) on Turkish banks (for ROE test), and Mikati, (2012) on US large commercial banks but against Zain Abd & Sok Gee, (2007) in Malaysian banks.

5.2.2 Guarantee Management Practice

The study finding indicated as there is a continues annual increase in guarantee commitment; it has shown an increment of 2,403.4% during the past ten years to June 2019; and by 221.0% for the past five years to June 2019; indicating the increase trend in us off balance sheet commitments in Ethiopian private Bank as a means of diversifying income like the studies conducted by Al-Tahat1 et el, 2016. This indicated a growing concern over the associated risk as it demands commensurate risk management, monitoring and control system in order to balance the risk and the benefit sought from this product.

Risk Understanding

From the analysis we come to understand that there is common understanding that guarantee products involves high risk and commensurate risk management system and internal control is needed. The study finding also indicated increasing income, increase in competition for deposit and NBE bill purchase requirement are among the major factors that pushes banks to involve in guarantee and at the same time poor KYC, poor collateral; which are a reflection of increase in competition, and employees integrity is the major three cause that causes for most guarantees to default.

Guarantee Processing & Appraisal

The result indicated the industry's practice in processing and appraisal of guarantee facility is unsatisfactory as shown by mean of 3.32 and standard deviation of 0.49. Inadequate appraisal, absence of independent guarantee appraisal and monitoring function, absence of dedicated guarantee administration function, senior management influence on approval decision, Poor KYC coupled with poor collateral coverage (58% indicated collateral coverage is from 0% clean to 75%) and relying more on movable properties , inadequate pre audit are among the major problems reflected in the industry.

Polices & Procedures

The study indicated the industry's poor internal control system as justified by mean of 2.12 and standard deviation of 1.33. The result disclosed the industry does not have standard separate guarantee appraisal and administration policy and procedure. Even among the respondents indicated they have separate policy and procedure, majority indicated as it does not have product and sector limit and the compliance level of the policy is also unsatisfactory. This ensures, as the practice lacks consistency, poor board oversight, absence of clearly set roles and responsibilities of each organ in the bank to manage OB risk.

Monitoring and Control

Overall, the study result indicated monitoring and control activities of the industry is not satisfactory as indicated by average mean of 3.18 and standard deviation of 0.52. respondents expressed their disagreement with mean of less than 3.0 for question stating the bank perform pre audit before issuing guarantee, collateral is usually in the form of immovable property and the bank has pre-set guarantee concentration limit across various guarantee product. And they also indicated their low agreement level with mean of 3.43 for the statement stating the bank periodically prepares contingent liability report for the board. The result is also validated as majority 66% indicated default rate of guarantee is more than 5% which is the maximum limit allowed by NBE on loans.

Follow Up

The study finding indicated monitoring and follow up practice of the industry is also unsatisfactory as expressed by infrequent business visit, usually when the customer's

credit worthiness is deteriorated /during extension or default/. The result also indicated as banks prefer to extend defaulted guarantees and renegotiate with the customer as they do not have the upper hand /adequate collateral to foreclose/. As a result defaulted guarantees kept in receivable for long periods as converting to loan would involve provision or the customer may not be willing to sign loan contract.

Roles and Responsibilities of NBE

The average mean respondents result indicated the central bank is not active or doing unsatisfactory in ensuring the safety and soundness of banks from guarantee product as shown by mean of 3.07, standard deviation of 0.667 with minimum value 1 and maximum value of 4.667. The result indicated much is expected from the NBE to play its monitoring role in ensuring the safety and soundness of financial institution from such products. As per the average mean result, respondents indicated their disagreement to the questions evaluating NBE in playing its monitoring role like sufficient supervisory reporting, disclosure requirement, Guarantee risk classification, provisioning , cover during on-site examination, updating on current macroeconomic indicators and providing guarantee defaulter list by giving mean value ranging from 2.8 to 3.3.

5.3 Conclusion

The study indicated OBC is increasing from time to time that quests for the attention of senior management and the Board to set commensurate risk management system and that of NBE to issue tight regulation to ensure the safety and soundness of financial institutions as it has significant negative impact on the banks liquidity and capital adequacy but no major impact on the Banks ROE as tested in the hypothesis.

Overall, the study result indicated there is common understanding that guarantee products involves high risk and commensurate risk management system and internal control system is needed but the fact on the ground, i.e the existing OBC management practice is not commensurate with the inherent risk of the product as shown with average mean value of 3.16 and standard deviation of 0.53.

The finding also indicated weaknesses on the central bank in playing its monitoring role in relation to OBC as respondent indicated NBE failed to keep the industry abreast of new development by engaging in dialogue with them and keeping them abreast by providing

current macro-economic data and defaulter list on guarantee. The central bank was also claimed for failure to establish prudential reporting system to ensure that all significant OBC are adequately captured in supervisory returns, ensured for their quality and provisioned well to protect depositors' interest and window-dressing financial records.

The study indicated OBC is increasing from time to time that quests for the attention of senior management and the Board to set commensurate risk management system and that of NBE to issue tight regulation to ensure the safety and soundness of financial institutions as it has significant negative impact on the banks liquidity and capital adequacy but no major impact on the Banks ROE as tested in the hypothesis.

5.4 Recommendations

The very objective of this study was to assess the overall risk of private banks OBC: by investigating its relationship with risk & return and assessing the quality of their risk management practice. Based on that, the following possible recommendations are forwarded to minimize the residual risk sought from this product.

Much of the survey finding indicated poor internal control system, poor KYC, Poor Collateral, absence of dedicated unit, absence of pre-audit, absence of limits, poor reporting, poor follow up, etc indicated the problem is policy issue and rose from lack of separate guarantee appraisal and administration policy and procedures. So, it is recommended for the bank to develop separate guarantee management policy and procedure that clearly articulates the roles and responsibilities of each organ in the management of OBC, define appropriate limits depending on the inherent risk of the product and their capital.

Besides, it is recommended for banks to establish dedicated centralized guarantee management function that clearly define the role of those who approve and monitor such facility.

Most respondents indicated guarantee product is highly exposed to fraud both from internal and external source. So, banks shall consider to establish adequate and effective internal control system supported by IT and to use standard guarantee letters like cheque to avoid easy fabrication.

The study finding also indicated as private banks neither use cash flow or collateral based guarantee undertaking system. So, it is recommended to use either cash flow commitment undertaking or collateral based by performing adequate customer appraisal and implementing appropriate KYC procedure.

The study also indicated poor monitoring and follow up is one of the reasons for default in guarantee, so it is recommended for banks to establish proper monitoring and follow-up mechanism in order to identify problems before it becomes a major concern.

Last but not least, I recommend NBE to abreast the sector by providing updated macroeconomic indicators, guarantee defaulter list and establish black list individuals that are fired from the sector due to integrity problem and issue commensurate guarantee appraisal, administration and reporting directive that improves its effectiveness in ensuring the safety and soundness of the industry in relation to guarantee and improve the risk management system of the industry as the level of association between risk of failure and non-banking activities increases when there is no tight regulation on the banks activities.

5.5 Areas for Future Studies, Theoretical Contribution & Policy implication

This study is under taken by analysing impact of OBS commitments on credit risk, liquidity risk, capital adequacy risk, revenue and ROE and by assessing the quality of the existing OBC management practice of private banks and role of the NBE as well. Due to various constrains, I cannot include impact of OBC on operational risk, strategic risk and market risk particularly foreign exchange risk and interest rate risk; that can be areas for future studies for researchers. Besides, relationship between OBC management practice and performance, and relationship between bank's size and OBC can also be future research area to answer the on-going debate between risk management system and performance and impact of bank size on level of OBC.

From the study we have come to know that OBC of the private sector is increasing at an increasing rate; on the other hand, their OBC management practice including role of NBE is not on same track. This would urge various stakeholders like Board and Senior Management to examine their OBC approval and administration activities; and the National Bank, to issue commensurate directives in this regard as increase in OBC would have significant and negative impact on the bank's liquidity /solvency/ & capital adequacy,

significant positive relationship with revenue but insignificant and negative relationship with credit risk and ROE.

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APPENDICES

Appendix I: Questionnaire

Questionnaire

Addis Ababa University

College of Business and Economics

EMBA Program

Dear Respondents,

I am undertaking research on Letters of Guarantee management practice and impact on performance on selected private commercial banks operating in Ethiopia for my Master Degree in Executive Masters of Business Administration. Kindly fill in the questionnaire. Please do not write your name on the questionnaire. Your genuine response is solely used for academic purpose and the data will be treated utmost confidentially. You may contact me via tel. +251 911 16 13 79 or e-mail yeshita2005@yahoo.com for any queries. Your kind cooperation is appreciated in advance.

Part one: Respondents Profile

Instructions: Please use √ mark on the box provided to indicate your response.

1. Name of Bank_____

2. Gender:

☐ Female ☐ Male

3. Years of service (Experience) in banking sector: _____

4. Credit related experience in banking sector----------

5. Level of education:

☐ Diploma ☐ Bachelor Degree (BA, BSc) ☐ Master's degree ☐ PhD

6. Field of Qualification?

☐ Accounting ☐ Economics ☐ Management ☐ Marketing ☐ Other

7. Current position

☐ Department Manager and Above
☐ Branch Manager
☐ Loan Officers
☐ Risk Officers
☐ Other

8. Department

☐ Risk ☐ Audit ☐ Credit ☐ Branch ☐ other

Please indicate to what extent you agree or disagree with the statements in the table *Part Two: Risk Understanding*

Items	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1. Managing guarantee risk is important to the bank's performance and success.					
2. Existence of separate guarantee management policy is crucial					
3. There is significant board and senior management involvement in guarantee risk management in your bank					
4. There is a common understanding of guarantee risk management across the bank					
5. Responsibility for guarantee risk management is understood throughout the bank					
6. Accountability for guarantee risk management is understood throughout the bank					

7. Which of the following factors will you consider severely increases guarantee risk (default in guarantee) in your bank? Please priorities in their order from 1-10

☐ Poor KYC & Risk analysis
☐ Poor monitoring by management
☐ Lack of adequate education and training
☐ Employees' integrity
☐ Degree of Competition in the banking industry
☐ Poor Oversight by the National Bank
☐ Poor collateral
☐ Poor Internal Control System
☐ Wilful default
☐ Inadequate Internal Control System

8. What are the major risks likely to be encountered by your bank from guarantee (please list in order of importance)
   A. _____
   B. _____

C_____
D_____
E_____

9. What are the major reason that makes your bank engage in guarantee (please list in order of importance)

☐ Income
☐ Shortage of deposit
☐ Increase in competition for deposit
☐ Less regulatory (NBE) requirement
☐ No Bill requirement
☐ No provision requirement
☐ Does not seen in balance sheet of banks by shareholders or other stakeholders

Part Three: Guarantee processing and appraisal

Item	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1. The bank demands a business plan from all clients to identify risk exposure from					

guarantee commitments					
2. The bank looks at relevant experience of the guarantee applicant					
3. The bank carries out guarantee monitoring activities independent of the appraisal function					
4. The bank's guarantee approval process establish accountability to decision makers					
5. There are times the guarantee appraisal of applicant's can be influenced by directors, senior managers or influential staff of the bank					
6. The bank looks at collateral whenever granting any guarantee facility					
7. The bank considers the past repayment track record of applicants for guarantee facility					
8. The guarantee analysis and appraisal procedure followed by the bank in issuing guarantee is excellent					

Part Four: Policies & Procedures

1. Do you have separate guarantee appraisal and administration manual or policy?
   ☐ Yes ☐ No ☐ not sure

2. Do you think it is up to date & convenient for guarantee risk exposure?
   ☐ Yes ☐ No ☐ not sure

3. If your answer to Q no, 2, is "No", specify the impediments encountered

_____
_____
_____.

4. Do you have portfolio limit for various type of guarantees (like bid bond, advance payment, suppliers credit guarantee

☐ Yes ☐ No ☐ not sure

5. What is your compliance level towards policy & Procedure on a scale of one to five, with one being the least level of compliance and five the highest level of compliance?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Part Five: Monitoring and Control of Guarantee Exposure

Items	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1. Collateral estimation is regularly assessed					
2. Collateral is a must before one is granted guarantee?					
3. Collaterals for guarantee are usually in the form of immovable properties (building)					
4. The bank/branch do pre audit before guarantee commitment has been taken					
5. The bank/branch implement the condition & sanction set by different appraisal organs					
6. The bank periodically prepare contingent liability (guarantee) reports for signalling loss in any portfolio					
7. Guarantee risk report is periodically reported to the Board					
8. The guarantee portfolio is distributed among customers engaged in different sectors of the economy (DTS, import, export, construction, etc)					
9. The bank guarantee concentrate in particular sectors of the economy					
10. The bank has pre-set guarantee concentration					

limits in every sector					
11. The Bank has pre-set guarantee concentration limits by type of guarantee. (bid bond, performance, advance, suppliers, etc)					

12. How long it takes to process and make a decision on a single guarantee request?

☐ Less than 3 days ☐ 3-5 ☐ 5 to 10 days ☐ > 10 days

13. How does Most of your current guarantee is created

☐ By approaching promoted clients ☐ By clients approached the bank with request

14. How much do you estimate your bank's guarantee default rate?

☐ <5% ☐ 5-10% ☐ 10-15% ☐ 15-20% ☐ >20%

15. How much percentage does the collateral cover the defaulted guarantee

☐ <25% ☐ 25% - 50% ☐ 50 – 75%) ☐ 75 -100% ☐ >100%

Part Six: Follow-up

1. Do you think guarantee administration system used by your bank is effective?

☐ Yes ☐ No ☐ Not sure

2. If your answer to Q1 is "No", please specify the appropriate technique/s/ that you think is best?

_____

_____

_____.

3. How often does your institution visit clients business after guarantee letter has been issued?

☐ Monthly ☐ quarterly ☐ Semi-annually ☐ at time of excision ☐ at time of default

4. What do you think is/are the major reason/s/ for default of guarantee in your bank/ Branch?

☐ Lack of follow-up

☐ Lack of training or poor customer appraisal

☐ Wilful default

☐ Poor collateral

☐ Others, (specify) _____

5. What measure/s is/are taken on the side of the bank to reduce loss from default in guarantee? (Hint: Check all answers that apply) /please order in their priority from 1 to 4/

☐ Guarantee extension

☐ Convert to loan

☐ Convert to receivables

☐ Searching for attachable properties

☐ Others, (specify) _____

6. What measures are taken by the bank to enforce repayment? (please order in their priority form 1 to 3)

☐ Foreclosure

☐ Court proceedings

☐ Negotiation

☐ Others, (Specify) _____

7. How do you evaluate the guarantee enforcement mechanism?

☐ Effective ☐ Ineffective

8. If your answer to question no. 7 is "Ineffective", what is/are the reason/s/ behind this?

☐ Buyers don't want to buy some one's property because of default

☐ Limited purchasing power of the society

☐ High initial estimated amount

☐ Difficult to find properties in case of movable properties

☐ Others, (specify) _____

9. Would you please specify any problem/s/ of guarantee management that your institution faces so far apart from the above raised issues?

_____

_____

10. For the problem/s/ that you mentioned above, please list out all the possible and better solution/s/ that can improve the guarantee management system of your bank

_____

_____

Part Seven: Role of NBE.

Item	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1. NBE plays significant role in ensuring the safety and soundness of the banking industry in connection with guarantee					
2. NBE issues a directive requiring approval or administration of guarantee					
3. NBE put in place sufficient reporting requirement with regards to guarantee portfolio					
4. NBE put disclosure requirement or report on defaulted guarantee					
5. NBE set criteria to classify guarantees based on their risk category					
6. NBE set requirement to set reserve for defaulted guarantees					
7. NBE give emphasis on outstanding guarantees issued to customers during their on-site examination					
8. NBE updates banks on the current macro-economic indicators in relation to guarantee					
9. NBE provides guarantee defaulter list to protect banks facing similar problem					

Thank you for your time

Appendix II: Industry Data

(Value In Billions of Ethiopian Birr)

Year	Guarantee	LC	Total OBC	Total Asset	Total Deposit	Core Capital	Total Revenue	NPL Ratio	LIQR	CAR	ROE
2010	1,815.6	4,150.3	5,965.9	50,352.1	38,540.8	5,293.8	4,382.9	7.97%	70.69%	23.67%	26.02%
2011	2,062.2	4,574.1	6,636.4	64,987.5	50,256.6	6,955.1	5,972.4	2.81%	62.48%	26.64%	27.22%
2012	4,496.3	7,428.8	11,925.1	78,852.6	59,664.9	9,043.2	7,755.4	2.00%	47.88%	22.08%	27.49%
2013	6,148.2	7,309.0	13,457.2	98,323.3	76,625.1	11,067.0	9,324.9	3.02%	47.41%	21.80%	24.98%
2014	7,373.8	7,872.6	15,246.3	120,846.1	92,105.9	14,909.4	12,156.4	2.88%	38.73%	21.24%	24.39%
2015	11,681.4	7,267.5	18,948.9	153,681.8	117,527.8	18,079.2	15,713.4	2.49%	27.31%	18.09%	22.93%
2016	16,128.6	14,713.9	30,842.5	188,922.2	145,672.1	22,315.1	19,627.7	3.97%	26.83%	18.24%	19.57%
2017	20,962.2	14,713.9	35,676.0	259,717.2	199,051.6	28,501.2	26,345.7	2.55%	27.84%	15.86%	21.97%
2018	32,977.7	13,683.3	46,661.0	349,070.4	278,427.9	35,747.7	37,803.2	2.67%	27.65%	14.57%	24.07%
2019	45,452.4	15,369.9	60,822.4	453,043.1	357,903.0	49,124.5	46,944.6	2.87%	14.69%	14.07%	27.65%

Source: NBE and individual bank CAMEL report by NBE

Appendix III: Test of Assumptions

No.	Hypothesis	R	R Square	Beta Value	Constant Value	P- Value	Result	Relationship
1	H01: No statistically significant impact of off -balance sheet Commitments on the Credit risks of Ethiopian Private commercial banks	-0.269	0.072	-0.269	3.981	0.452	Failed to reject Ho	No
2	H02:No statistically significant impact for the off -balance sheet commitments on the Liquidity risks of Ethiopian private commercial banks	-0.761	0.579	-0.761	56.935	0.010	Reject Ho	Negative
3	H03:No statistically significant impact of off -balance sheet commitments on Ethiopian private commercial banks Capital Adequacy Risk	-0.908	0.824	-0.908	24.539	0.000	Reject Ho	Negative
4	H04:No statistically significant impact of off -balance sheet commitments Ethiopian private banks revenue	0.977	0.955	0.977	-548.04	0.000	Reject Ho	Positives
5	H05:No statistically significant impact of off -balance sheet commitments Ethiopian private banks ROE	-149	0.022	-149	25.2	0.681	Failed to reject Ho	No

Source: SPSS Result from secondary data collected from NBE and CAMEL report of individual private Banks

Appendix IV: Survey Result

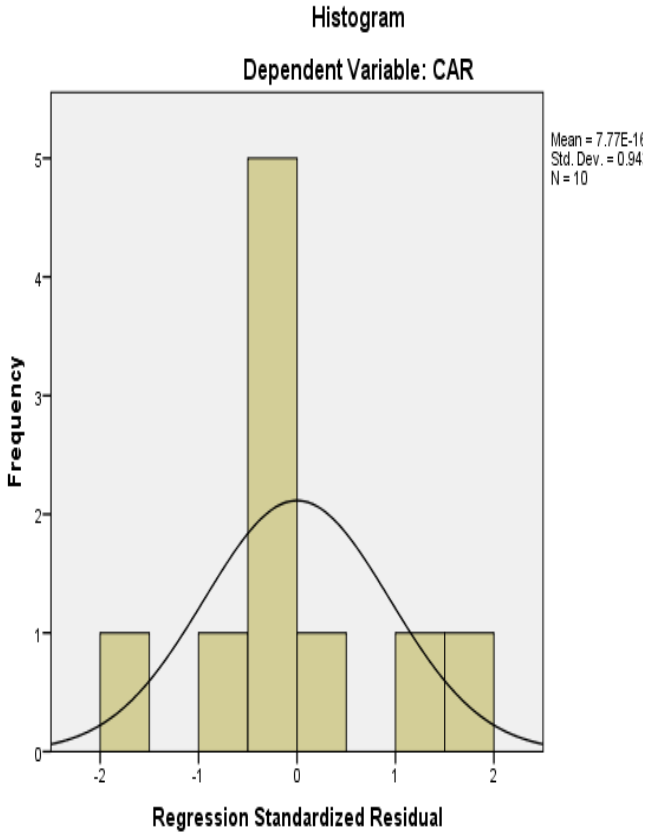
S/N	Guarantee Management System	Mean	Std. Dev.	Min.	Max.	Result*
1	Risk Understanding (mean of means)	3.6039	0.5307	2.3333	5.0000	Good
2	Guarantee Processing and Appraisal (mean of means)	3.3321	0.4924	2.1250	5.0000	Unsatisfactory
3	Policy and Procedures (mean of means)	2.4219	1.3275	0.0000	5.0000	Poor
4	Monitoring and Follow up (mean of means)	3.1837	0.5220	1.8182	4.3636	Unsatisfactory
	Average mean of means (from 1 to 4 above)	**3.1645**	**0.5328**	**1.9663**	**4.3784**	Unsatisfactory
	Roles & Responsibility of NBE					
5	**Responsibility of NBE (mean of means)**	**3.0715**	**0.6673**	**1.0000**	**4.6667**	**Unsatisfactory**

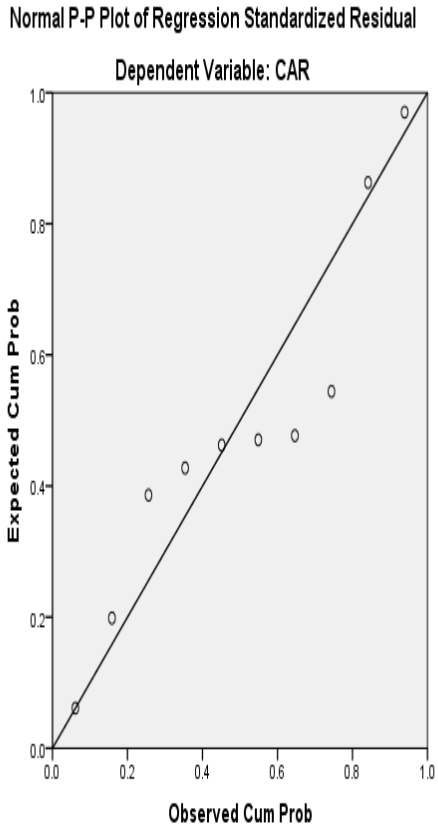
Source Survey Data,
**Below 2.5 unsatisfactory, 2.6 to 3.5 Unsatisfactory, 3.6 to 4.5 Very Good, >4.5 Excellent*

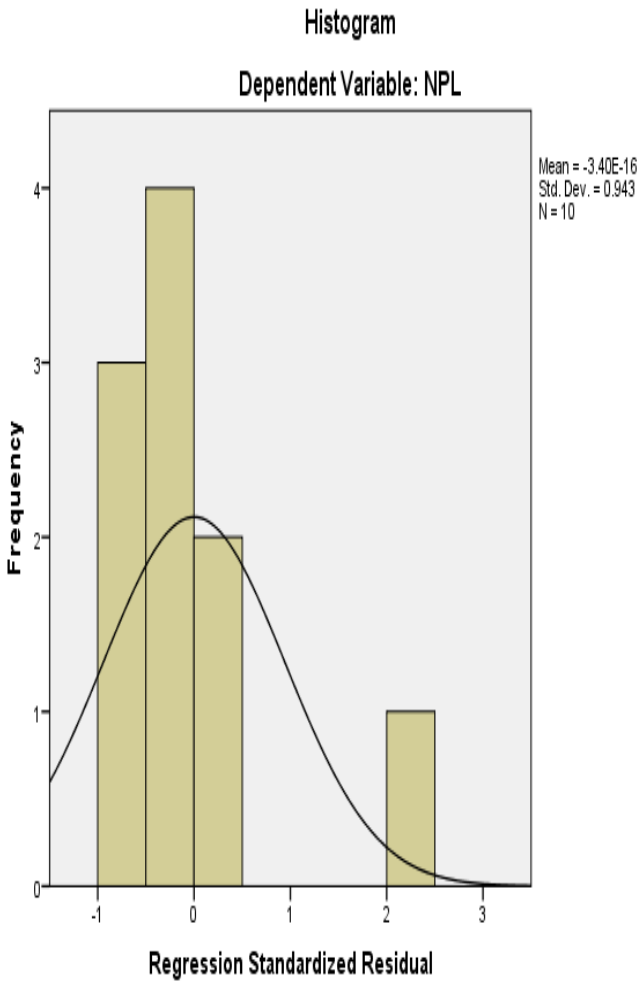
Appendix V: Private Bank years of Establishment & Sample Taken

S/N	Banks	Year of Establishment	Years of Service	Sample Taken
1	Awash International Bank	1994	25	11
2	Dashen Bank	1995	24	12
3	Abyssinia Bank 1996	1996	23	10
4	Wegagen	1997	22	20
5	United Bank	1998	21	
6	NIB	1999	20	
7	CBO	2004	15	21
9	Lion	2006	13	13
9	OIB	2008	11	
10	Zemen	2008	11	
11	Bunna	2009	10	12
12	Birhan	2009	10	12
13	Abbay	2010	8	14
14	Addis	2011	7	14
15	Enat	2012	7	7
16	Debub Global	2013	6	
	Total Sample size			146

Appendix VI: Data Linearity and Normality Test



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Dependent Variable: NPL
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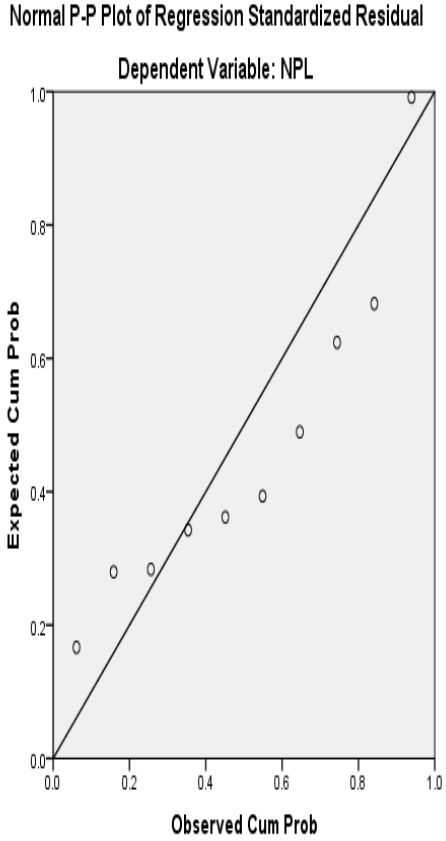
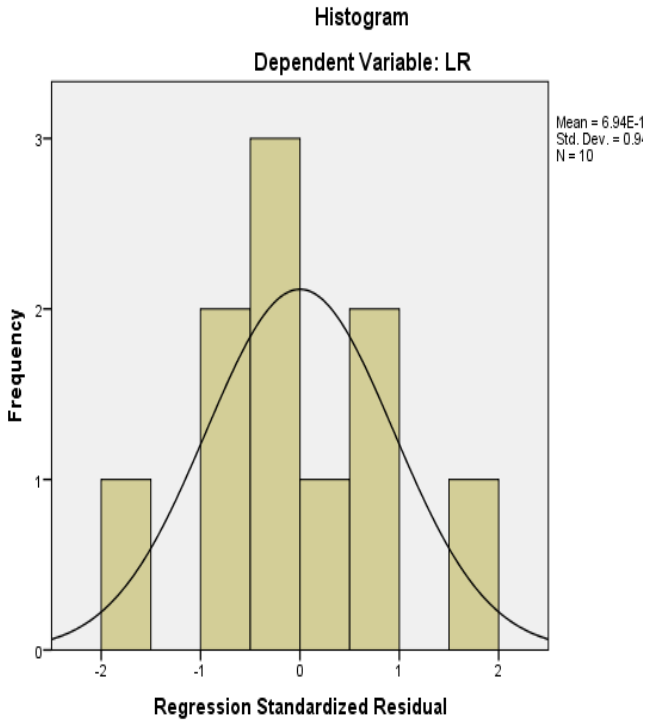
Frequency
Regression Standardized Residual


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: NPL
Expected Cum Prob
Observed Cum Prob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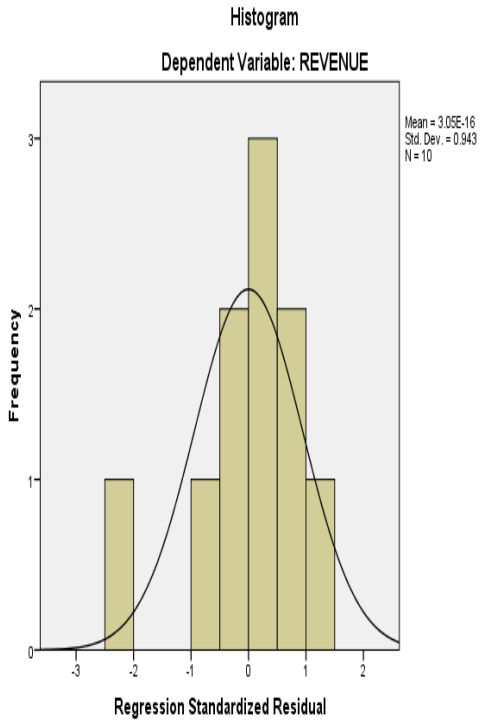
Frequency
Regression Standardized Residual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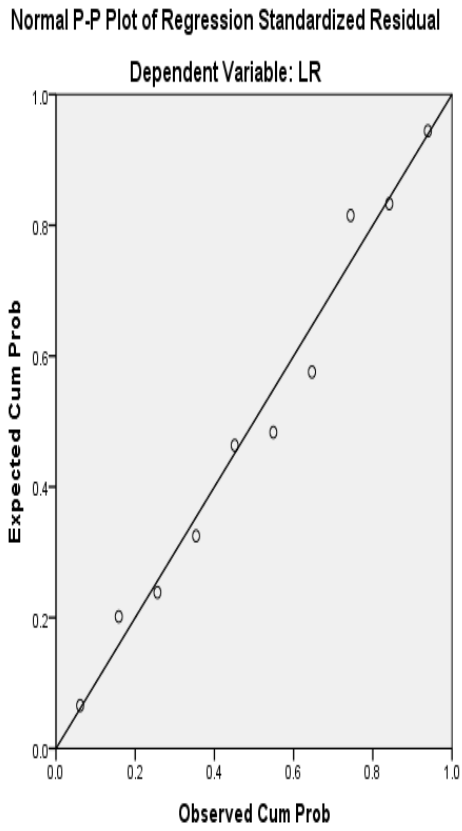
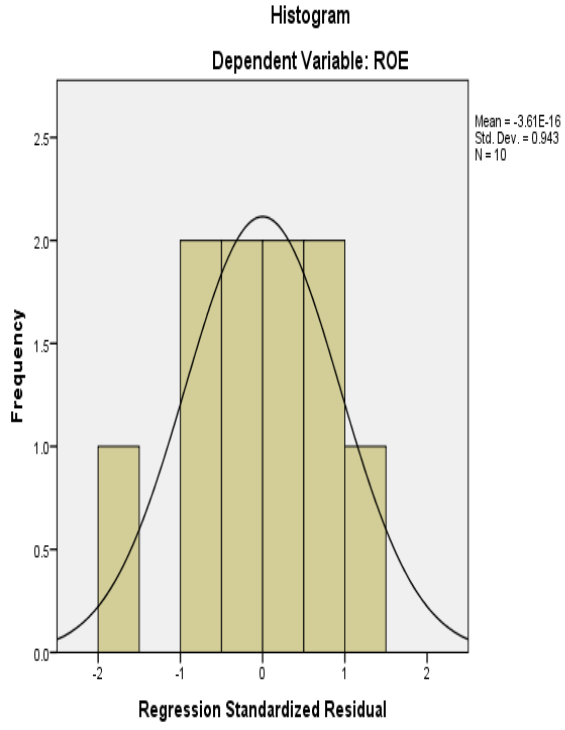
Dependent Variable: REVENUE
Mean = 3.05E-16
Std. Dev. = 0.943
N = 10
Frequency
Regression Standardized Residual


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: LR
Expected Cum Prob
Observed Cum Prob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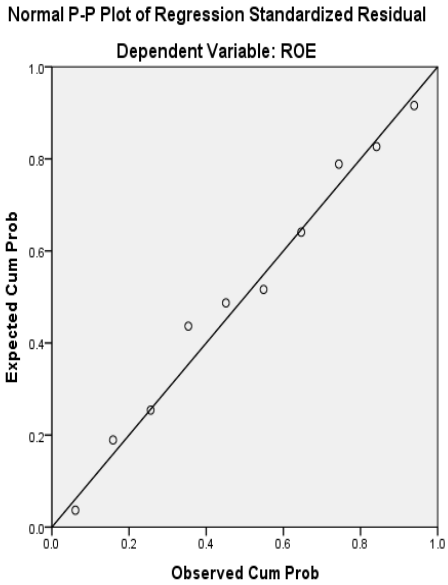
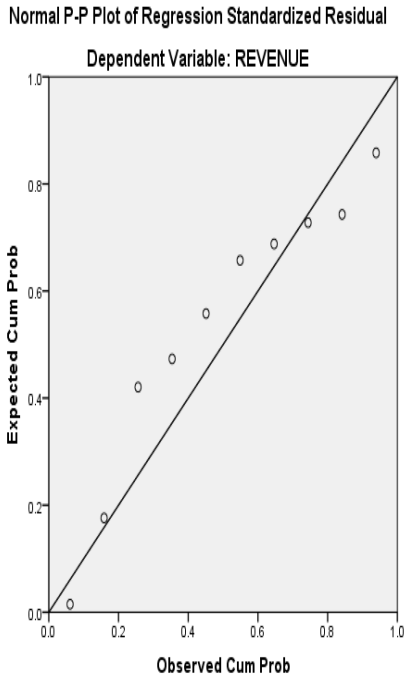
Std. Dev. = 0.943
N = 10
Frequency
Regression Standardized Residual


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: ROE
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: REVENUE
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0